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Online Today Electronic Edition provides daily-updated computer and information industry news, coverage of CompuServe services, commentary, computer product reviews and more.

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EBB-11 **Instructions on use of the Electronic Bounce Back reader service system**.

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EBB-70 **Shopper's Guide**.

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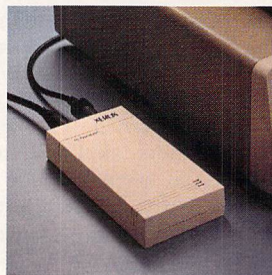
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D E A R R E A D E R

You might say that students at the Columbus (Ohio) Academy are well-traveled. They venture to faraway places every few weeks to learn about such things as African safaris, nuclear power, constellations and black holes. But they don't need to remember permission slips and sack lunches, and there's not a long bus ride.

Columbus Academy is one of a dozen schools nationwide participating in the Students' Forum on the CompuServe Information Service. The students "travel" online — logging on and learning from experts outside their local communities. Their tour guides have included a zoo director, a scientist and a senator, all of whom visited one of the participating schools and addressed the rest of the Students' Forum members. Forum Administrator Dave Winslow reports that the field trips are one of the most popular activities for high school students.

The ability to travel without leaving home is one of the educational and social advantages to being young and online. The traditional limitations of geographic distance and age disappear as students communicate with people of all ages and backgrounds. In addition to visiting others through the Students' Forum, young people can find friends through forums for rock music fans, comic book collectors, model aviation kit builders, space enthusiasts, Disney World buffs and more.

Those seeking entertainment will find trivia and adventure games, including *The Multiple Choice, You Guessed It!, Science Trivia, Air Traffic Controller* and *The Island of Kesmai*. In these games and others, skill and knowledge are important, and players of all ages are welcome. And when it's time to tackle homework, students can access online resources, such as the Einstein reference database and the online edition of Grolier's *Academic American Encyclopedia*.

In this month's cover story, "To Be Young and Online," beginning on page 14, Contributing Editor Carole Houze Gerber explores the many online alcoves that appeal to young people.

For anyone with an interest in desktop publishing, CompuServe offers several ways to expand creative capabilities. Corporations such as Software Publishing, Hewlett-Packard, Aldus, Microsoft and Ashton-Tate support their desktop publishing products through online forums. To find out more about desktop publishing, see the article on page 20.

* * *

The 50,000 most active members of the five Apple Forums will receive a special Apple insert in the October issue. The insert will include an interview with Apple management, a forum overview and tutorial by Neil Shapiro, an article about expert Apple users and more. If you're not already an active member, type GO MAUG and join one of the Apple Forums.

* * *

Online Inquiry is the new name for *Online Today's* electronic version of the traditional reader inquiry card. You can request additional information about products or services described in *Online Today* by accessing CompuServe and typing GO OLI at any prompt. For more information, see page 54.



Douglas G. Branstetter
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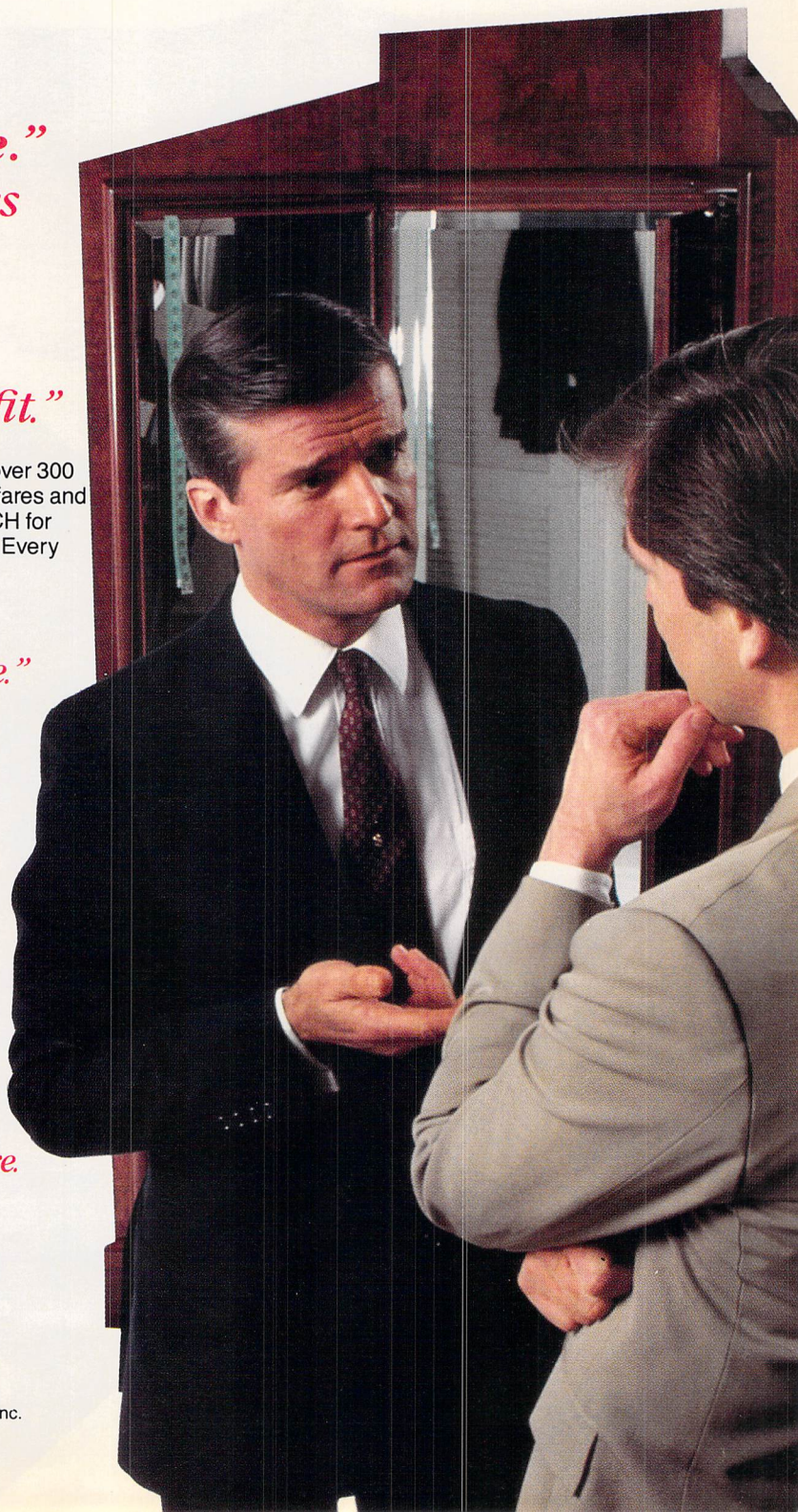
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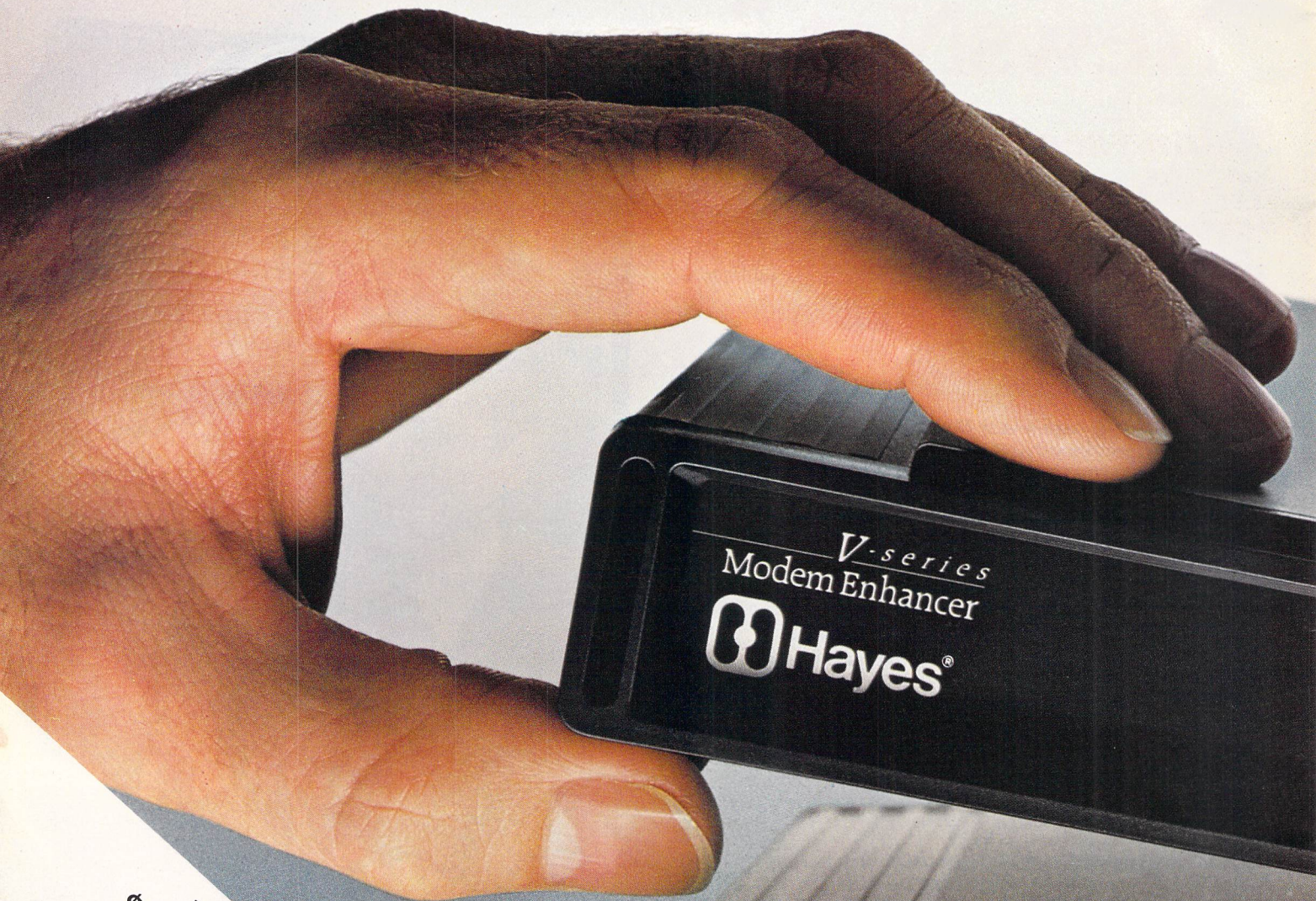
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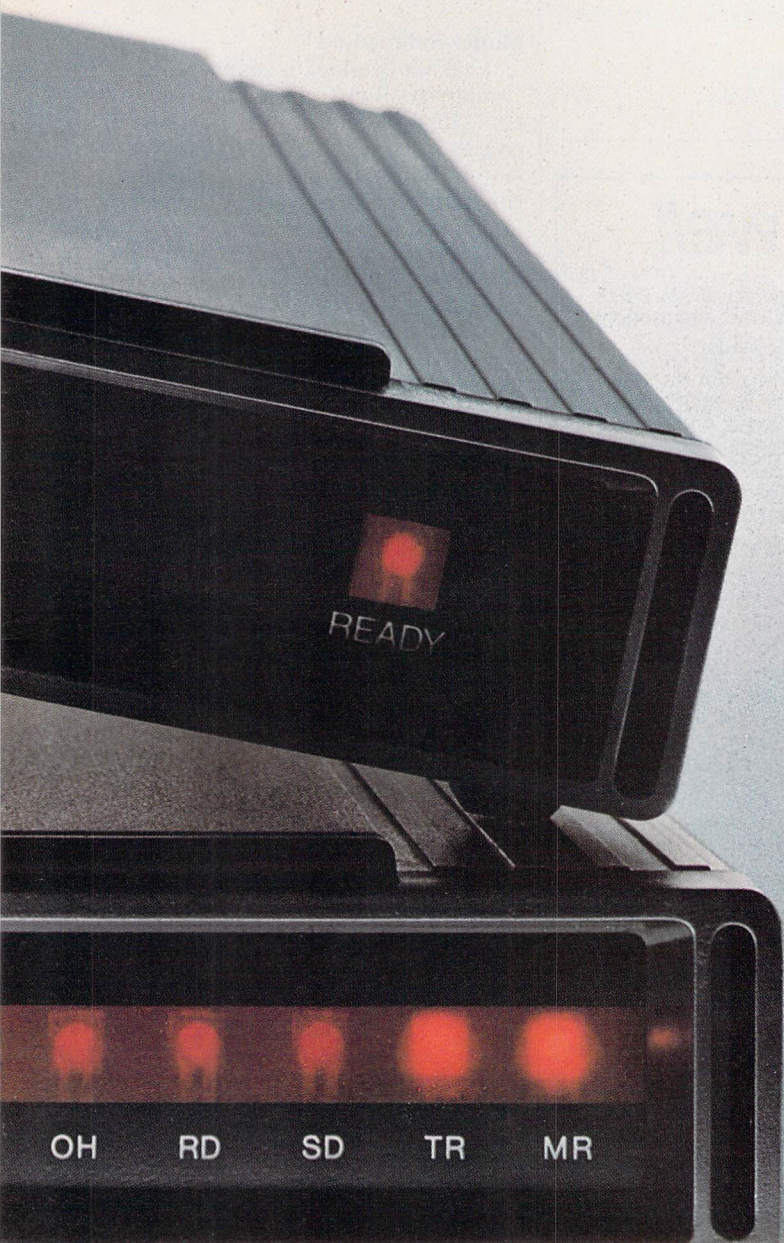
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Access Numbers

I recently moved from Berkeley, Calif., to Boston and tried to use the access phone numbers listed in the IntroPak but they were woefully out of date.

I think that current access numbers should be listed in each issue of *Online Today*. To get the Boston number, I had to use the California number and type GO PHONES. Publishing current numbers would save users a lot of aggravation.

Richard Lasky
Brookline, Mass.

Computer Terminology

I have a comment about "New Microprocessor Packs in the Power" (May 1987, p. 8). Normally the term *kilo* means 1,000; *mega* means 1,000,000; and *tera* means 1,000,000,000,000. However, in computer terminology, 1 kilobyte equals 1,024 bytes, not 1,000. So a terabyte is actually 1,099,511,627,776 bytes.

Most people don't know this, but to a programmer the distinction between 1,000 and 1,024 bytes is an important one.

Bret Mulvey
Woodinville, Wash.

Electronic Edition Hardware Reviews

I read with interest the review of the VPC II (GO OLT-2234) as I recently purchased a Victor Champion from a discount mail-order house. It compares favorably or exceeds the performance of the IBM PC-XT that I purchased 18 months ago.

I learned from Victor that the units purchased during March and April had the Zucker video board and Victor was replacing them, at no charge, by request. I received the replacement board within a few days and did not have to mail back the old one until I installed the new one. I recommend Victor and the unit highly.

Peter Stromquist
Granada Hills, Calif.

Electronic Mail Costs

Although the instructions about sending electronic mail to multiple recipients (May 1987, p. 24) were correct, you did not mention that there is a charge for this service. I learned this only after incurring an 80-cent charge, but if I had sent my message to more people, the cost would have been much higher.

Emery Harmon
Santee, Calif.

Editor's Note: Subscribers can send an EasyPlex message to as many as 10 receivers at one time. EasyPlex notifies subscribers of a 10-cent surcharge for each of as many as nine receivers after the first. EasyPlex will not send the message until the surcharge notice appears and the subscriber types Y at the "Is this correct? (Y or N)" prompt.

Model Railroading

I cannot overlook a comment in "Hobbyists Run Trains with Computers" (June 1987, p. 8). Mr. DeNatale is quoted as saying, "Everyone who is into model railroading as a hobby has either completely or partially converted to a digital layout."

I do not know the source of his authority, but I see hundreds of model railroad hobbyists every week and I do not know of anyone who has made this change. I am a Modelnet representative for The Model Railroad Shop in Piscataway, N.J., a store that has been in business since 1933 and is one of the oldest model train stores in the country.

I think that DeNatale's comment makes the hobby—that attracts the kid with \$5 to spend—look like just another high-tech, high-cost pastime.

We work hard at the retail level to help beginners get started with this hobby. I do not feel that DeNatale's comment—inferring that one is not "with it" unless he or she has expensive digital equipment—is constructive or warranted.

J.G. Kucsma, President
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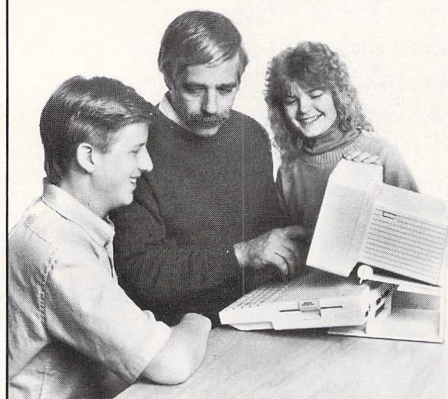
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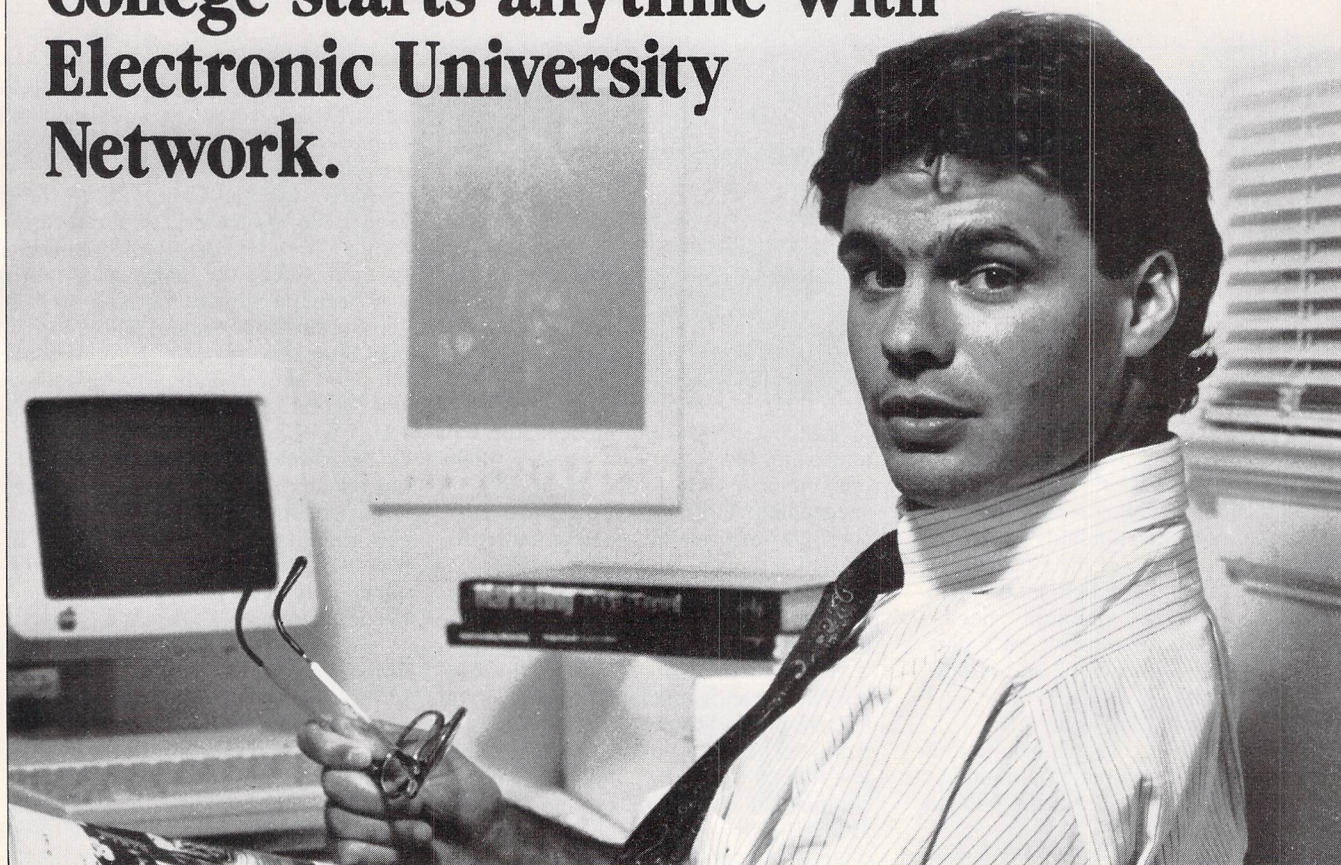
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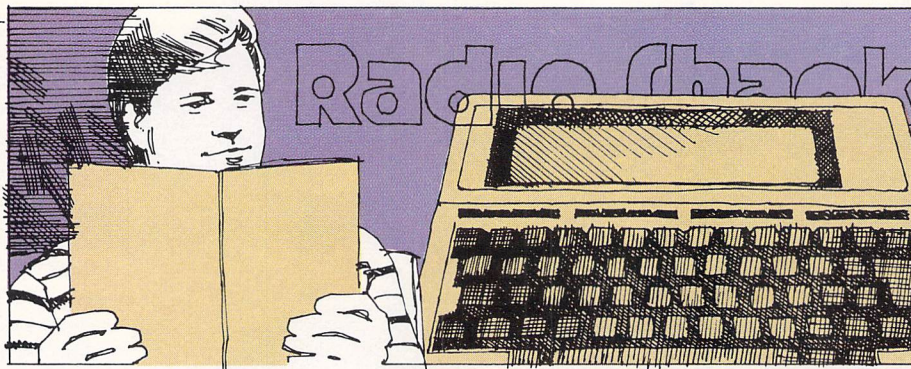
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Laptop Computerists Create Magazine

Publishing a new computer magazine could be by some standards an act of sheer bravery. One of the latest entrants into this highly competitive market is *Laptop User*, a monthly magazine devoted to the interests of Radio Shack Model 100 (and 102 and NEC PC-8201) users.

The founders, April and J.D. Hildebrand (she is the publisher and he is the editor), have created a mom-and-pop press they call Shoestring Publications.

The magazine has how-to articles on innovative uses for the laptop, industry news, product information, reviews and a column on people who use these computers.

Because there is no major laptop magazine, the Hildebrands believe their publication stands a good chance of succeeding. They reason that software and hardware vendors need an outlet to advertise their new products, while laptop users have no consistent method for discovering new products without those ads.

While there are many financial risks, the Hildebrands remain optimistic. "There is a void in the market," says April. "The laptop market is one of the few that can actually support another computer magazine because so many Model 100s have been sold and continue to be sold."

The magazine is affiliated with a national laptop users group called Club 100. For an annual fee of \$30, Club 100 members receive a quarterly newsletter,

a laptop carrying bag, discounts on hardware and software purchases, and *Laptop User* via first-class mail (everyone else gets it third-class).

Active users of CompuServe and the Model 100 Forum (J.D. is the former forum administrator), the Hildebrands first announced the magazine's publication during a Sunday morning Model 100 Forum conference. "There were only 30 people or so in the conference, but word got out and within a week we had 350 subscription requests," recalls J.D. "We couldn't get by without CompuServe. We communicate with our readers this way. It has been an important force in determining the editorial direction of the magazine. In fact, the editorial sections were determined only after polling Model 100 Forum members."

Laptop User is mailed free of charge to individuals who qualify. To subscribe, send your name, address, telephone number and a list of your computer equipment to Shoestring Publications via EasyPlex, User ID number 73717,2674.

For more information, contact Shoestring Publications, Pickering Wharf, P.O. Box 712, Salem, MA 01970; 617/745-7027.

— Cathryn Conroy

Booming Market Predicted for 80386

For months, analysts have been forecasting that Intel's 80386 microprocessor is going to have a major effect on the personal computer industry. A new report backs up those predictions.

The study, "Markets for Products Based on the Intel 80386 Microprocessor: System, Software and Peripherals," was compiled by the Market Intelligence Research Co. of Palo Alto, Calif. A key finding of the study is that the total market for 80386-related products (computers, software and peripherals) will top \$4 billion in 1991 and level out to about \$3.4 billion by 1993. The study also predicts that IBM will be able to use the 80386 to reassert itself as an industry leader.

For more details, contact the Market Intelligence Research Co., 4000 Middlefield Rd., Palo Alto, CA 94303; 415/856-8200.

— John Edwards

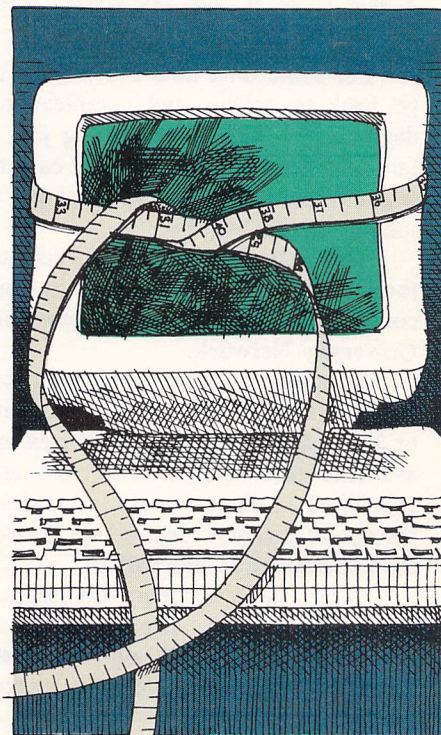
Chatting Online Helps Cut Calories

I've lost about 70 pounds in the past few months, and I attribute much of my success to CompuServe. (How's that for a testimonial? Can't you just see the book: *The CompuServe Diet*? Any publishers reading this?)

My secret? It's easy. Whenever I get the urge to eat, I log onto CompuServe and begin typing. The idea is to not do something passive, such as downloading a 640K file at 300 baud, but to reply to messages on a forum or engage in some heated social debate on the CB Simulator.

Happily, positive reinforcement is available. The "Weighty Matters" section of the Human Sexuality "B" Forum (GO HSX-200) is a great place to meet fellow dieters and to garner moral support.

Best of all, this diet aid doesn't have to be expensive. I've found that after 10 or 15 minutes the hunger pangs usually go away, enabling me to safely log off.



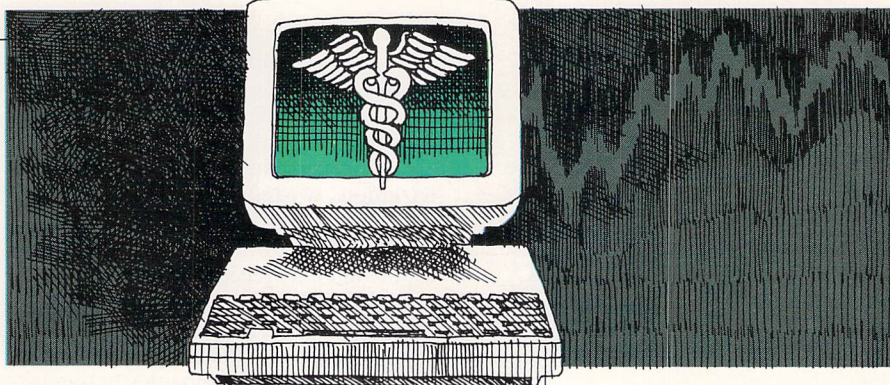
Computer Monitoring Makes Surgery Safer

The Cleveland Clinic is using computers to monitor patients during surgery. The computers are used in a variety of operations, but there is a special focus on brain and spinal cord procedures.

Intraoperative (real-time) computer monitoring is a research effort and is not being used routinely for neurological procedures, according to Dr. Richard Burgess, director of Neurological Computing for the clinic.

"We're trying to develop methods that will use brain wave recordings while a computer processes data necessary for decision making. We need to look at those patterns to determine when an abnormality has occurred. The computer assists the physician who is trying to interpret those patterns."

Using specially developed techniques, physicians in the operating room can check the functioning of the brain and spinal cord. This is important during operations in which the spine is



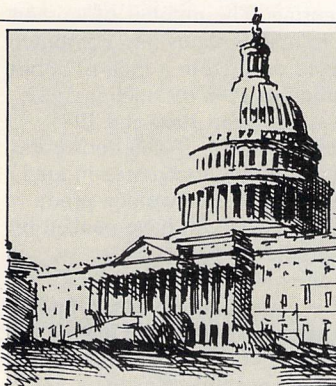
straightened with adjustable metal rods. In such procedures, it is important not to straighten the spinal cord too much in any one operation, because straightening it too fast can pinch it. Computer monitoring of the activity going through the spinal column can alert the surgeon before damage occurs.

Computer monitoring also is useful in operations to remove malformed blood vessels or tumors that may damage the spinal column if extracted with too much force.

"Before this kind of monitoring, the patient could become paralyzed," ac-

cording to Dr. Burgess. "However, sometimes patients have more subtle abnormalities, and these monitoring techniques may not pick them up. Sometimes there will be no change in the patterns, and we'll think everything is fine until the patient wakes from the operation with a subtle abnormality or, in some cases, a more pronounced one. We are not able to stimulate every nerve in the spinal column, and there may be damage to some of the nerves we are not monitoring."

— James Moran



FIRST AMENDMENT

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble

Center Examines Electronic Media

Most CompuServe subscribers — as well as users of other database networks and bulletin board systems — routinely upload and download information. But how many stop to think about their legal rights?

Electronic communication is not afforded the same First Amendment privileges that the print and broadcast media enjoy. It is not that the First Amendment excludes this new medium; rather it is a problem of interpretation of the law.

A new organization headquartered in Washington, D.C., wants to see full First Amendment protection for the "wireless press." Called the First Amendment Center for the New Media,

the group serves as a consistent voice to advance the First Amendment rights of the emerging electronic media, including online databases, videotex, teletext, cable television and satellite news gathering.

Alarmed that the nation's policy makers in both the legislative and judicial branches are not granting complete First Amendment rights to the electronic medium, program consultant Lee Burdick says, "The way we see it, these companies have the same content as a traditional newspaper or broadcast operation. The only difference is the method of delivery."

To get its message across, the Center, which is the first of its kind in the nation, publishes studies and monographs, offers seminars and conferences, participates in panel discussions,

and files briefs with regulatory agencies and the courts.

Because it is a non-profit research organization, the Center is prohibited from formal congressional lobbying. Burdick insists, however, that lobbying is not needed because no new laws are needed.

"Our law has already been passed. Our law is the First Amendment. We need to re-educate our policy makers and the electronic information providers so they understand our perspective," Burdick says. "We believe the strict newspaper model of the First Amendment should be applied to the new communications media to allow them to flourish and develop as alternative information sources."

CompuServe subscribers who want to know more about this issue can consult a number of files provided by the Center, located in the data libraries of the Public Relations and Marketing Forum (GO PRSIG).

For more information, contact Lee Burdick via EasyPlex at 73220,3335 or by writing or calling The First Amendment Center for the New Media, The Media Institute, 3017 M St., Washington, DC 20007; 202/298-7512.

— Cathryn Conroy

Online Changes Mark Growth of Industry

It is said that the more things change, the more they stay the same. But this is not so in the online services industry.

Within the past year, 576 databases came online, 108 databases ceased operation and more than 1,000 other services changed in some significant way, according to the *Directory of Online Databases*.

"It is not easy to characterize the change, but we definitely do not interpret it as a downturn in the industry," says Dr. Carlos A. Cuadra, president of Cuadra Associates Inc., the company that publishes the directory. "If anything, the industry is getting hotter. During the past year, 189 database producers, 42 online services and nine gateways made their debuts."

Vertical markets are being pursued more aggressively by information services, according to Cuadra. "New business and industry markets and particularly new groups of professionals within these markets are being targeted

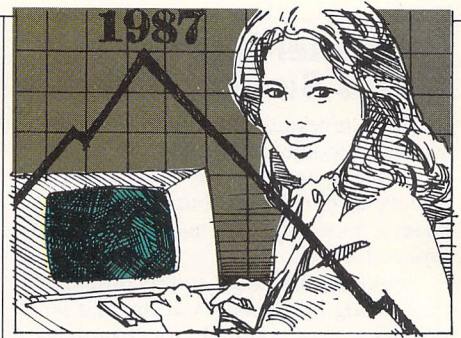
with more in-depth coverage of all types of communications emanating from legislative bodies and government agencies and with special-interest databases covering such 'hot' topics as hazardous wastes, high-tech areas, 'Star Wars' and AIDS," says Cuadra.

Cuadra notes that established services, as much as recent start-up firms, are responsible for industry changes. "All the action is not just in new ventures," he says. "We are seeing a number of established companies acting in an aggressive and preemptive way to build 'locks' in their marketplaces." Veteran online companies, says Cuadra, are looking to control markets "by creating multifaceted online services that cover a range of databases of interest to professionals in a given industry."

The Directory of Online Databases is available both online and in print.

More details are available from Cuadra/Elsevier, P.O. Box 1672, Grand Central Station, New York, NY 10163; 212/916-1180.

— John Edwards



High-Tech Hiring Slows for Women

Women, long excluded from meaningful employment in the computer and engineering industries, have made some impressive gains within the past few years. But one employment expert warns that opportunities for young women in these fields may soon dwindle.

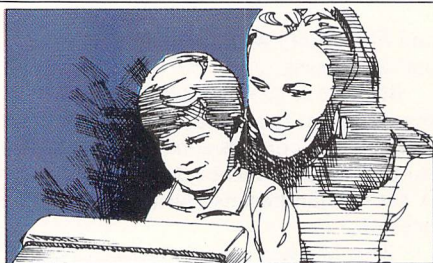
Betty M. Vetter, executive director of the Washington-based Commission on Professionals in Science and Technology, claims there is "serious doubt" as to whether women can continue to expand their participation in science and engineering. The number of women graduates in mathematics and computer science could drop from a high of about 22,400 women in 1986 to 9,600 in 1989, Vetter says. Between 1960 and 1985 women earned almost 57,000 doctorates in science and 1,000 doctorates in engineering. The number of women graduating in engineering will have peaked by 1987, she predicts.

Vetter cites various reasons that these changes are taking place. Opportunities in the marketplace, though somewhat improved for women, continue to lag behind those for men, she says. Several programs to recruit women into science and engineering also have been dropped, Vetter adds.

"In general," she says, "the professional community of scientists and engineers has made little effort to welcome women into their fraternities, particularly in those fields in which few women worked before 1970.

"Whatever the reasons, the marked increase in participation of women in science and engineering that has occurred over the past 15 years appears to be at an end," says Vetter.

For further details, contact the Commission on Professionals in Science and Technology at 202/223-6995. The commission is a private, non-profit organization formed in 1953 by major scientific societies to focus on problems in scientific employment.



Online Access Helps Handicapped Users

Those who have an interest in or a need for special access to computers now have a source of free information. Access Unlimited—Speech Enterprises, a national, non-profit organization based in Houston, Texas, is distributing personalized information packets to handicapped adults and children who want to learn more about using computers.

Interested individuals can specify the type of disability, the developmental or age level, interests and other needs, by calling a toll-free telephone number. With this information, Access Unlimited—Speech Enterprises will put together information on the best computers and software to purchase, sources for those computers, special peripherals that may be needed, training possibilities and prices, plus information on the organization.

Sherry Lowry, president of Access Unlimited—Speech Enterprises, started the group after her son fell three stories and suffered massive head injuries at the age of 12. She and her husband discovered that computers opened a new world for him and helped him to better cope with everyday life.

She says that at least 10 percent of the US adult population is disabled or handicapped in some manner, including victims of diabetes, strokes, head injuries, glaucoma and other eye diseases. Computers and telecommunications are helping many to read and communicate when it might not otherwise be possible.

Lowry is convinced that computer access improves the self-esteem of the disabled because it gives them independence. "Computers offer freedom and full use of individual potential. I've seen people's goals change and with that the whole perspective of life changes—all because of the computer," she says.

For information, contact Access Unlimited—Speech Enterprises, P.O. Box 7986, Houston, TX 77270; 800/531-5314 (nationwide), 800/292-5619 (in Texas) or 800/821-0728 (in Hawaii and Alaska).

— Cathryn Conroy

GO Commands Make It Easy to Take Quantum Leaps Online

The subject this month is quantum leaps and how, as a new user, you can make big jumps on the system work to your advantage.

CompuServe's menu trail is excellent for those who need road signs at every turn. In addition, the menus give clues to what the ever-expanding system contains. But they aren't the most efficient way of getting around the system.

If you have not yet been introduced to the GO commands, learn about them as quickly as you can and try to get comfortable with them in your early sessions. They'll save you time and money and make your online experience more pleasurable.

If you have been afraid to let go of the menus because you think you may get lost, consider that the menus themselves are sort of an illusion. Choosing menu numbers to take you to the service you want is hardly necessary. The GO commands are closer to the actual command language of the program that drives CompuServe than the numbers associated with menu choices.

As with any computer system, the closer you get to the language of the machine itself, the more efficient your use of the system is likely to be. That is why you're able to move from one area to another quickly and without traveling up and down menus when you use the GO commands.

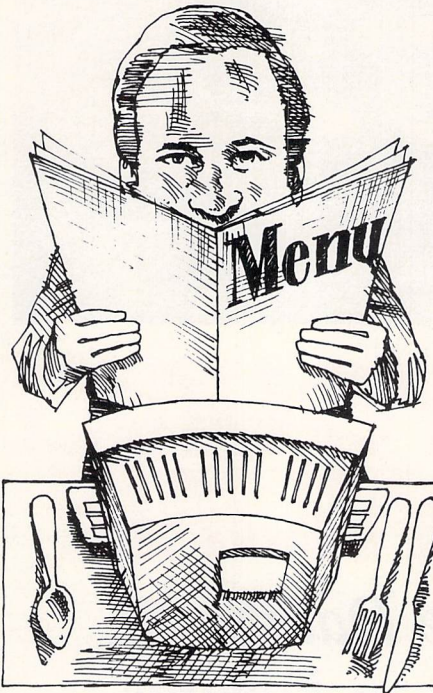
Every major service on CompuServe has a word or a page number assigned to it. Most of the time it is a recognizable word and you'll see it in the upper right-hand corner of the first display page of the service you're entering. All you need to do to go to that service is type GO plus the word or page number and press the Return key. Sometimes you don't need to type the entire word, but it is a good idea to do that at first to help you remember.

These page numbers and words are available online through the index (GO INDEX) or by using the FIND command. They're also contained in printed documentation and in articles in this magazine.

Where can you use the GO commands? Even experienced users sometimes don't realize that you can use them in a variety of places on the system.

You can type GO commands at the

end of a main menu, including the TOP menu, which is the one you probably see when you access CompuServe. The familiar exclamation prompt (!) at the end of these menus is the signal that you can type a GO command to take you directly to a service. For example, The National Weather Service forecast cannot be accessed directly from the top menu. But, if you type GO WEATHER, or simply GO WEA, at the prompt, you'll be taken directly to



the main NWS Weather Menu where you can get state and local forecasts, precipitation probabilities, weather warnings and other NWS services. In effect, what you are doing is bypassing a couple of "layers" of menus to take you directly to the NWS menu.

What if you are in one of CompuServe's forums and you want to go to another service? Do you need to exit the forum to get back to a menu before you can type a GO command? Not at all.

You can use the GO command from the Function: prompt or the Function menu in any forum to go directly to another service. For example, if you are in the IBM New Users Forum (GO IBMNEW) and you want to get a stock market quote, all you need to do is

type GO QUOTE at the Function menu or Function: prompt and you'll leave the forum and go into the Quick Quote service without seeing any menus.

If you're in a forum data library and come to an exclamation prompt, it is the same kind of command prompt you see at the end of the main menus. You can type a GO command at this prompt to make the big jump to another service.

If you're in a forum conference area or the CB Simulator and you want to transfer quickly to another service, precede your GO command with a slash (/).

Occasionally, you may find yourself in an area where nothing is familiar and the lack of a command prompt makes you wonder if you will ever find a way out. For example, the system may "hiccup" occasionally when you're trying to access a service. "That service is temporarily unavailable" may appear on your screen and you'll wind up in an area where the only message is "OK." While this is actually not as ominous as it might seem to a beginner, it can be disconcerting.

When you're in unfamiliar territory, try this: Create your own command prompt. You can do it by entering a CONTROL-C (pressing the Control key and the "C" at the same time. On some machines, you must press more than one key to create a Control character. Check your computer manual for the proper sequence for entering a CONTROL-C.)

When you press Control-C, it is a message to the system to interrupt whatever is going on at that time and present you with some options. The options may vary, depending on where you are, but at the end of those options, you'll see the familiar ! prompt. From there, you can type a GO command to take you to more familiar territory.

Just as the menus on CompuServe are sort of an illusion, the feeling of being lost on the system is likewise illusory although it can create anxiety for beginners. Mastering the GO command techniques can minimize that apprehension and make your online time more productive and gratifying.

David Peyton is co-author of How to Get the Most Out of CompuServe and Advanced CompuServe for the IBM PC Power User, both Bantam Books. His CompuServe User ID number is 76703,244.



TO BE YOUNG AND ONLINE

Youth Explore Databases, Find Friends in Forums

By Carole Houze Gerber

Not all computer kids these days are wizards. Many are "just plain folks" who use computer networking as a vehicle for meeting friends, learning facts, mastering hobbies and a host of other uses both practical and esoteric.

One of the biggest benefits of being young and online is the opportunity to travel without leaving home, according to Judy Barrett Spurgin, author of *Educator's Guide to Networking: Using Computers* (Southwest Educational Development Laboratory, 1987). In most cases, children and teen-agers — like adults — are somewhat confined by their lifestyles. Where they live and who their friends are shape them. Get-

ting online provides a quick, easy and fairly inexpensive way of getting out of their own communities to learn what the rest of the world is doing."

Another plus, says Spurgin, is that youngsters make friends online based on important things, such as interests, rather than on outward appearances. "It is a safe medium for kids," she explains. "No one has to be dressed up. No one has to be beautiful. It doesn't matter whether you're young or old or handicapped, male or female. People of widely different backgrounds can forge relationships based on common interests instead of, for example, limiting themselves because one is

retired and the other is in high school."

Find a Friend in a Forum

Most kids find their friends in obvious locations, usually at school or in the neighborhood, and they can look in the same places online. The difference is that online forums offer not one school or one neighborhood but dozens.

There are forums for hobbies and forums for chatting; forums for looking at pictures and forums for playing games; forums for hanging out with friends your own age and others for listening to world-renowned experts offering the lowdown on space (GO SPACEED) or science fiction (GO SCIFI) or even on fish (GO FISH-NET). If you're not sure what you want, type FIND FORUMS at any prompt for a list of forums and GO commands.

Many forums offer regularly scheduled conferences, ranging from nightly to weekly. Others add special powwows when a celebrity guest makes an appearance. During forum conferences, members can participate in real-time discussions with peers and experts. To queue up for a question, type a question mark and press the Return key.

It is fine to visit forums without joining — after all, you'd check out a neighborhood before moving in. But if a conference is in progress, courtesy dictates that you announce your presence after a few moments, even if you'd rather listen than talk. "Lurking" is discouraged online just as eavesdropping is in person.

If it is information you're after, check the forums' data libraries — some have as many as 18 libraries filled with information categorized into such areas as public-domain software, product reviews and transcripts from online conferences.

To find new entries in the data libraries, look in the Data Library Bulletin; to learn the name and contents of each library, type DL. Information contained in members' messages is available in 18 message subtopic areas. (All forums have the capability for 18 subtopic areas and 18 data libraries; however, not all use this many.)

For computer hobbyists, hardware and software forums provide a place to trade information, swap machine-specific programs and textfiles, and upload and download public-domain software. Technical assistance is available from forum administrators. To

check on whether a particular computer-specific forum is available, type FIND at any prompt, followed by the brand name of your computer. Type APPLE, for example, and you'll be shown a list of seven forums for Apple computers.

If you're not looking for specific information or for a friend with a particular hobby, the CB Simulator is the place to be. The ambiance on CB has been compared to that of a college mixer — without the once-over to see how you look and what you're wearing.

If you *do* want to take a peek at your new friend, check the CB Pictures (GO CBPIX) to see if he or she has an online photo on display. To see how his online mug stacks up to Tom Selleck's, check into Hollywood Hotline (GO HHL) to compare him against Tom and several dozen other male and female stars whose images are on file.

Many people on other forums also are on CB, so although it is not the most direct way to meet someone with a specific interest, it is one way to go about it. Discounted connect-time rates are available through CompuServe's CB Club (GO CBCLUB). If you have questions about this or any other product, type GO QUESTIONS to leave a question for Customer Service, look for an answer in the database of common

forum-related questions or find out how to contact Customer Service directly.

Track a Fact in a Database

In addition to the data contained in the forums' data libraries, a number of separate services are available. Among those having educational value for young subscribers is Einstein (GO EINSTEIN), which offers junior and senior high school students access to 90 databases covering such topics as English, literature, science, health, social studies and computers, specially selected to meet their needs.

A variety of reviews on films, books, hardware and software are stored in Einstein's databases. Created by the publishing company Addison-Wesley, Einstein is easy to use because you simply enter your keywords and Einstein does the rest. Young researchers who are not sure which database to search will be led through a series of menu choices to narrow their topic.

Keep these simple pointers in mind and your search will be easy: If your keyword is hyphenated ("Three-Penny Opera"), drop the hyphen. Leave out common words such as OF, THE, FOR, TO and WITH. Either uppercase or lowercase letters will work. There is no limit to the number of keywords you

can use in your search request. Also use the online HELP facility.

For example, a search on the book *Gone With the Wind* would be shortened to the keywords "Gone Wind." Einstein will immediately restate your entry to double-check its accuracy. Then, Einstein will tell you which database is being searched and, using the shortened keyword or keywords, will search out the word or words. You may follow any keyword by a slash (/), which is used as a wildcard to tell Einstein to look for all forms of the keyword beginning with the letters you have specified. If you type "teen/", for instance, Einstein will search out all other forms of the word — "teens," "teen-ager" and "teen-agers."

Other tips: You can search for articles that contain all of your keywords by typing "AND" between the keywords. If you're not sure which of two related keywords is best, type "OR" and put the keywords in parentheses (money OR currency) and the system will search out either keyword in the appropriate database.

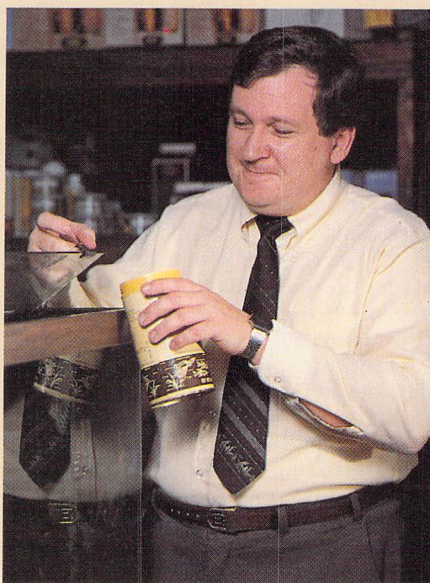
A well-rounded research tool, Einstein provides a number of viewpoints and sources for each topic. All searches are conducted in real-time, and results are displayed as biblio-

New Forum Lures Aquatic Enthusiasts

Those who decide to "go fish" online aren't participating in the old card game. Instead, they've dropped into the Aquaria and Fish Forum (GO FISHNET) to chat and swap information about ichthyology with other fish-lovers. The forum's 1,800 members range from goldfish owners with 10-gallon tanks to the staff of The Living Seas, a \$6.5 million aquarium in Disney World, according to Forum Administrator John Benn.

"Young people are welcome here," he says. "There is something for everyone in this forum. The aquarium hobby is organized around a lot of fish specialty groups, from the International Fancy Guppy Association to the American Cichlid Association. We have liaison people from each of the groups who arrange to get various specialists as guests at online conferences."

A regular get-together on this forum is the two-hour Sunday night ichthyology course offered through Northeast Missouri State University. Also fea-



Pulling members in: Benn

tured are a number of specialized message board discussion threads on such topics as tips on pond-culturing koi — a large Japanese fish — and goldfish. This particular subtopic is managed by

an MIT scientist who is an expert on the subject. "There is a data library and a subtopic area on the message board for beginners," Benn explains. "It covers such things as how to set up an aquarium and the correct amount to feed various types of fish."

Benn says that 1,300 articles on different aspects of keeping fish are stored in data libraries. Data Library 8, for example, has abstracts on books in the aquarium field that can be accessed by keyword, author or title. Data Library 6 is an index of entries on various species of marine and freshwater fish. "We now have 600 species indexed," Benn says. "The goal is to index information on all 20,000 of these species."

Finally, if you're a true ichthyophile who sticks by your fish in sickness and in health, the Aquaria and Fish Forum has the lowdown on the compounds and medications used in fishery science. In fact, it is the only source of an extensive, 4,000-entry bibliographic reference service called FISHDRUG/TXT.

— CHG

graphic headings, with abstracts or full-text articles available for many of the headings. Each Einstein search costs \$4 in addition to your regular CompuServe connect charges. Einstein is available after 5 p.m. weekdays and all day on weekends and holidays throughout the school year. From June 1 through August 31, Einstein is available 24 hours a day.

Other reference sources for students include Peterson's College Guide (GO PCG) and *Grolier's Academic American Encyclopedia* (GO ENCYCLOPEDIA). Peterson's database mirrors the

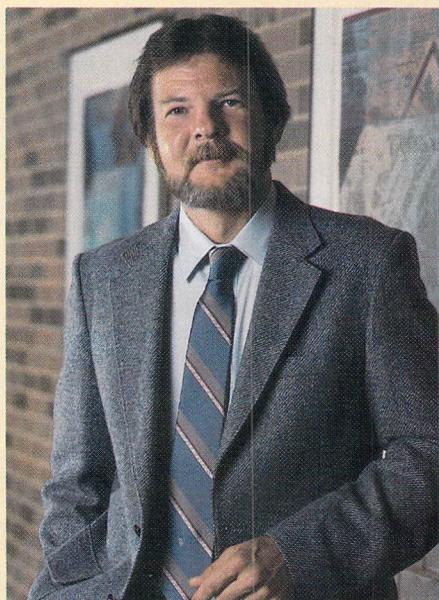
print version; it contains detailed descriptions of more than 3,000 accredited colleges and universities in the United States and Canada. Because it is updated quarterly, the 10 million word online edition of *Grolier's Academic American Encyclopedia* is more current than the print version at your local library. Particularly for reference on current events, the online encyclopedia is a superior product.

There is no surcharge for using *Grolier's Academic American Encyclopedia*, beyond the normal CompuServe

connect-time fee. However, to conduct a search you must subscribe to Grolier's Online Edition, which costs \$49.95 for a year's subscription, \$29.95 for six months or \$7.50 for one month. All subscriptions provide unlimited access.

To conduct a search on Grolier's, type GO ENCYCLOPEDIA to get to the database, then begin your search at any prompt by typing SE followed by the singular form of your search term.

If the search turns up nothing, perhaps your search term is too specific.



"Visions of America:" Frederiksen

Visit an Art Gallery, Create a Masterpiece

When art teacher Kris Frederiksen and Larry Wood, Picture Support Forum administrator, met online, it was — as they say — the start of something big. That something is the National Electronic Art Gallery, a display of student art that "hangs" in Data Library 11 in the Picture Support Forum (GO PICS).

The idea for the gallery came about as a result of Frederiksen's job as a resource person on a federal grant funding a citizenship education and social studies project for five Columbus-area middle schools. The citizenship theme, "Visions of America," is the subject of students' pencil drawings, which Frederiksen uploaded to the forum using a video camera and digitizer. "We thought it was going to



Gallery exhibit: Pencil drawing by A.J. Savage, Worthington, Ohio

be 50 pictures of the Statue of Liberty," Frederiksen says. "But we didn't get a single one — what we got was mostly pictures of people. A seventh grader drew a picture of his pet, explaining that in American he has the freedom to own one."

The works of 18 students were singled out for special recognition in the first National Electronic Art Gallery contest held last spring. This fall, a second "Visions of America" contest — this one featuring prizes — is planned. All students in grades seven through 12 are eligible. The latest version of VIDTEX can be used to upload the pictures, or a variety of free graphics software — with a version compatible with most computers — can be obtained from the Picture Support Forum.

However, says Frederiksen, young artists needn't own RLE (Run Length

Encoded) and VIDTEX graphics software to enter. Instead, they can send photocopies of their drawings to him or to Forum Administrator Wood, who will digitize and "hang" the artwork in the Picture Support Forum for free. "The drawings can be black and white or color," says Frederiksen. "And any medium can be used — but we won't be returning them, so please don't send originals. We'll get the pictures up within a day or two after receiving them."

At press time, contest details were still being finalized. For more information or to find Frederiksen's and Wood's mailing addresses, look in the Picture Support Forum. While you're there, why not browse through Data Library 11 to see how some young artists view America?

— CHG

As described in the section "Trouble Finding an Article" on the database, there is no entry for BALD EAGLE, but if you type EAGLE you'll find what you need. In other cases, a general entry for, say, HORSE will yield more than a dozen references, including horseradish and horse chestnut. Following your keyword HORSE with the symbol "#" would narrow your search to the four-legged animal. If your search term is a broad one, always type a "#" after the term to automatically narrow it.

Let's say your topic is aviation. Typing SE AVIATION will yield two categories: 1) aviation, 2) Table: Major Air Crashes. You choose the first and receive an overview on the history of aviation followed by a choice of eight additional categories: military aviation, commercial aviation, general aviation, aircraft manufacturing, government regulations, airports, airlines and bibliography. Accessing one or more of these narrow subject areas will give you the specific information you need.

Play Alone or with Friends

Also available through Grolier is *The Whiz Quiz* (GO WHIZ), which contains multiple choice questions in such categories as myths and legends, music, sports and science.

Designed for one to four players, *The Whiz Quiz* offers two chances to get each correct answer in the 30-question game. Each question is preceded by an interesting fact and followed with more information after the correct answer is given. A similar trivia game, this one based more on popular culture, is *The Multiple Choice* (GO TMC), which can be played by one or more players.

A trivia game for multiple players is *You Guessed It!* (GO YGI). An online version of a typical television game show, *YGI!* offers a host, audience and funny chatter. Unlike the *Whiz Quiz*, there is no one correct answer in *You Guessed It!*. Instead, questions frequently have several possible answers and the online audience and responses given by past players figure into determining the winning score.

For trivia games related to particular subjects, check the forums to see what's available. The Florida Forum (GO FLORIDA) sponsors a regular Disney trivia contest. Hollywood Hotline (GO HHL) has a movie trivia game and *ShowBizQuiz* also provides a trivia section for show-business buffs. The Science Education Forum offers a

Science Trivia Quiz to help young users test their science knowledge (GO SCITRIVIA). These are only a sampling of the many forums providing subject-specific contests and, in many cases, prizes ranging from T-shirts to free connect time.

More than two dozen adventure-type games, including *SeaWAR*, *Original Adventure*, *The Island of Kesmai* and many others are online. For information about these and other games, check the Gamers' Forum (GO GAMERS) or *The Electronic Gamer* newsletter (GO EGAMER). This regularly updated online magazine contains several categories of information for beginning and expert gamers. For example, *The Electronic Gamer* provides game hints, instructions for playing and solving various adventure games, game reviews, names of winners and other news of interest to game lovers. There is also a forum devoted exclusively to CompuServe's multiplayer games (GO MPGAMES).

In these games and elsewhere on the system, skill and knowledge are important — age is not, and players of all ages are welcome. Good manners, good sportsmanship and clean language are the only prerequisites for most forums.

Carole Houze Gerber is a contributing editor of Online Today. Her CompuServe User ID number is 70007,1215.

Einstein is a service mark of Addison-Wesley Publishing Co. Inc.

Other Areas of Interest

Sailing	GO SAILING
Family Computing	GO FAM
Science/Math	GO SCIENCE
RockNet	GO ROCK
HamNet	GO HAMNET
ModelNet	GO MODELNET
LOGO	GO LOGOFORUM

The Field Trip Revisited

Today's the big day — your school's annual field trip — but you forgot your parents' signed permission slip, your comfortable shoes are at home in the closet, and the bus seat you've been assigned is next to your ex-girlfriend's. It is enough to make you want to forget the whole experience.

Members of the Students' Forum (GO STUFO) don't have these problems. In addition, they get to travel online to exotic places every few weeks and meet experts outside their local communities. On recent field trips, forum members learned about African safaris, nuclear power, constellations and black holes, and what is happening in Congress. Their tour guides included a zoo director, a scientist and a senator, all of whom logged on at one of the dozen schools presently participating in the forum.

"We've made it easy for our guests by not requiring that they be computer literate," explains Forum Administrator Dave Winslow, a teacher at the Columbus Academy. "They don't even have to know how to type because the school that lines up the guest also provides a typist."

The conferences occur sometime between 11 a.m. and 2 p.m. EDT to accommodate schools on both coasts, Winslow says, and last about an

hour. "These field trips are one of the most popular forum activities for high school students," he adds. "I've gotten lots of letters from teachers asking how they can participate. Speakers next year will include sports figures and authors, as well as scientists I hope to line up from the Kennedy Space Center and from Epcot Center."

In addition to regular conferences, which have been expanded to cover topics of interest to elementary and middle-school students, the Students' Forum has 10 data libraries containing conference transcripts, student poetry, student book reviews and other information.

In Data Library 5 you'll find the *Discovery 500*, unavailable elsewhere on CompuServe. The newsletter, which celebrates the 500th anniversary of Columbus' discovery of America, contains interesting and obscure information on that famous traveler and his journey. The newsletter will be active for the next five years until the actual anniversary is reached in 1992.

Winslow has prepared a brochure describing the Students' Forum. It is free, and can be had by leaving him a message in the forum or by writing him at the Columbus Academy, 4300 Cherry Bottom Rd., Gahanna, OH 43230.

— CHG



Mastering online magic: Burton makes magicians appear in Micro-Magicon

He Believes in Magic

Steve Burton Pulls Magicians Out of Thin Air

Many people remember the thrill of seeing a magician pull a rabbit out of a hat for the first time. Steve Burton, a CompuServe subscriber from Houston, Texas, does not pull rabbits from a hat. He has other tricks up his sleeve. Burton, who is a magician, is responsible for making the Micro-Magicon — the first regular microcomputer magic conference — appear online.

While working as an emcee at a comedy club, Burton had the good fortune to meet the English magician Martin Lewis, who is well-known in the trade and is an inventor of magical effects. "The conversation eventually turned to computers and I found to my delight that Martin also was a CompuServe subscriber," says Burton.

Thereafter Burton and Lewis met online, exchanging ideas though they were separated by hundreds of miles. "We particularly liked the fact that we could beat the long-distance charges because CompuServe usually is just a

local phone call away," Burton says. Eventually the idea for an online magic convention was born. Lewis promptly dubbed it "The Micro-Magicon" and it has been popular ever since. However, getting the conference started was more difficult than Burton had expected. His long-distance phone calls had not turned up any magicians who were CompuServe subscribers, and most magicians did not have modems for their computers. "Luck finally struck when I found a fellow magician in Houston (Bill Palmer) who was also interested in computers," Burton says.

They compared notes and Burton talked Palmer into becoming a CompuServe subscriber. Burton then had three Micro-Magicon members including himself, and that following Tuesday evening, they had the first Micro-Magicon conference. "It was a stimulating conference that went on until the wee hours and we vowed to return each Tuesday to do it again,"

Burton says. "I discovered that the best way to do this was to meet in the CB Simulator area and to use scrambled code. This way we could talk uninterrupted and no one would be privy to our secrets."

Growth of the Micro-Magicon became a goal for the three magicians. These efforts helped the weekly conference grow to more than 50 members, and the Micro-Magicon became an electronic "back fence." When a magician friend was injured in a car accident, the word was out online the next day. "When I called the injured magician's workplace, the owner asked 'How did all of you find out about this? It only happened last night'," Burton says.

The Micro-Magicon is often a brainstorming session with new ideas popping up as quickly as dozens of people can type at one time. "We have created new effects online and have improved old effects through the comments and tips provided by other members," Burton says. "Hearing about new ideas on old tricks can make all the difference in the goal of trying to bamboozle the audience."

The Micro-Magicon has become more structured with the addition of "theme evenings." These special events have included lectures from notable performers, online trading sessions and even a surprise appearance by a long-dead magician for a ghostly question-and-answer session — not that unusual to a group of online sorcerers.

"One of the problems with being a professional magician is that it is difficult to go out and meet other performers because you are so busy performing," Burton says. "This can be a hindrance because a fellow magician frequently can give you tips on presentation and 'secrets'." There are conventions for magicians, but attending them can be expensive. Instead, the magicians stay in touch with the Micro-Magicon.

"The Magicon is an invaluable tool that helps me keep in touch with old friends and make new ones around the country," says Peter Samelson, a professional magician and author who does much of his work on cruise ships. "I have set up meetings through Magicon and we often get into discussions of theoretical questions and current news." Samelson soon will be giving a lecture on the theory and practice of magic in Micro-Magicon.

In the year and a half of this weekly

NEW PRODUCTS

New Subscriber Directory Online

The new online CompuServe Subscriber Directory makes EasyPlex communications easier by including the first and last name, city, state and User ID number of each of CompuServe's 350,000 subscribers.

To increase speed and streamline searches, the directory is searchable by name and does not contain an interest log. Subscribers are encouraged to list their interests in forum directories.

Subscribers may insert or delete their names from the directory at any time. GO DIRECTORY

Yacht Union in Sailing Forum

A US Yacht Racing Union subtopic and data library are available in the Sailing Forum.

L.K. Collins will act as the official liaison between the USYRU and the Sailing Forum, providing information on Union activities and articles from the Union's monthly magazine, *American Sailor*.

The USYRU is the governing body for all sailboat racing in the United States, including the US Olympic team and the Pan Am Games. GO SAILING

Substance Abuse Help in HSX

The Substance Abuse section of the Human Sexuality Support Group is offering Thursday meetings for recovering victims of alcohol and other drugs, and Sunday meetings for family members.

The meetings follow the 12-step principles offered by Alcoholics Anonymous and similar programs. All meetings are in the HSX Support Group B. GO HSX-200

Epson Forum Adds Conference

The Epson Forum has a new conference every Wednesday at 10 p.m. EDT for PX-8 Geneva laptop computer users.

This conference will answer new PX-8 users' questions about software compatibility, telecommunications and applications. PX-8 has become popular due to its recent liquidation by several discount houses. GO EPSON

Online Encyclopedia Updated

The Academic American Encyclopedia has been updated online.

get-together, some of the best magicians in the country have participated, including Penn and Teller, top pros often seen on "Saturday Night Live"; Jerry Field, collector of rare magic; Richard Hatch, translator and magical historian; Howard Schwarzman, the colorful international conjurer; and Jeff Busby, purveyor of magical books and apparatuses. "All magicians who are members have something to offer. We often learn something from even our youngest members," Burton says.

At the age of 12, Burton discovered that he could entertain his friends with simple card tricks he had learned from a book on magic. "This helped me overcome my natural shyness and I made friends more easily than I had ever thought possible," Burton says. Burton soon discovered that it also was a good way to earn money. "I became 'hooked' and have been studying magic for 18 years. It is my main source of income."

The magicians prefer that joining members also belong to any of several professional magic organizations, including The Society of American Magicians, the International Brotherhood of Magicians, The Magic Castle, The Magic Circle or any local club that requires the magician to subscribe to the "code of ethics." By joining one of these societies, you can learn much about magic and magicians, and this is necessary to understand the technical jargon used in the Micro-Magicon.

"One day we hope to have a beginner's area so that CompuServe subscribers with an interest in the arcane art can find some tricks and ideas that they may like to investigate online," says Burton.

Magic in the 1980s has much to do with the interest in the Micro-Magicon. Television specials by David Copperfield and Doug Henning have stimulated much interest. Burton has been featured on national television commercials and recently by *People* magazine. The professional magic organizations continue to grow as more amateurs join with hopes of becoming the next magic superstar. Electronic networks are helping aspiring magicians to make professional contacts. The Micro-Magicon presently is the only weekly computer conference for magicians. "I know it will continue to grow," Burton says. "You see, I believe in magic."

— Denise Erwin

The AAE offers CompuServe subscribers the most current encyclopedia available and now features information on affirmative action, AIDS, Nicaragua, nuclear energy and orthomolecular medicine.

The AAE can help you conduct research for speeches, business reports and schoolwork. It also provides background information about today's fast-breaking news. GO AAE

NORD Announces New Program

A "networking" program, sponsored by the National Organization for Rare Disorders, offers mutual support to people with the same "orphan disorder."

In many instances, people may have a disease and no voluntary agency or support group may exist yet for that condition. This program addresses the need to share information about specific conditions.

Those wishing to be in contact with others having the same disorder can obtain a written permission form for NORD's networking program through the NORD Services/Rare Disease Database. GO NORD

OAG Plans Special Surcharge-Free Week

The Official Airline Guide Electronic Edition invites CompuServe subscribers to make travel plans and reservations online free of surcharge from Sunday, Sept. 13, through Saturday, Sept. 19.

CompuServe connect charges and communication surcharges will remain in effect.

You can use OAG to locate the best fares quickly and conveniently because OAG lists the available flights and fares together. You also can use OAG to check flight and fare availability before you book the flight, arrange for ticketing and scan worldwide hotels and motels online. GO OAG

Talk to Us

Online Today Electronic Edition has a Feedback area for letters to the editor. Simply type GO OLT-33 from any prompt in the CompuServe Information Service.

ONLINE

T O D A Y

Desktop Publishing

Computer Forums Expand Creative Possibilities

Desktop publishing makes creating an entire newsletter, presentation or book easy and economical, and now CompuServe provides a variety of desktop publishing resources to expand creative possibilities.

"Desktop publishing is more dynamic than word processing because of its capability to manipulate graphics," says Kathy Ennis, CompuServe product marketing specialist. Desktop publishing integrates text and graphics and page assembly, eliminating outside typesetting, printing and design work. It saves corrections, proofreading, camera work, layout and courier costs with the capabilities of advanced graphic workstations.

"Personal publishers can find ways to use their systems more effectively and find support for specific products, software and printers online," Ennis says. Online support is available in the Software Publishing, Macintosh Business, Hewlett-Packard, Aldus, MicroPro Users, Microsoft and Ashton-Tate Forums. "All of these forums are corporate-sponsored except the Macintosh Business and MicroPro forums," Ennis says. "Users can expect answers to their questions online. They also will receive feedback and support from other product users."

To access Software Publishing Online, type GO.SPC and select Option 5, "Software Publishing Forum." "Personal Publisher is for first-time users of low-end desktop publishing and Harvard Professional Publisher is for high-end, more sophisticated desktop publishers," says Storey Lamontagne, Software Publishing spokeswoman.

Clickart Personal Publisher, a page-layout program for MS-DOS-compatible computers, displays true-to-scale fonts and images on the screen. Users can control the format and layout of each page, select from dozens of fonts and type sizes, and illustrate documents with unique drawing tools. Add-on enhancements and helpful utilities also are listed. Users will find brief product descriptions, hardware requirements and suggested retail prices of printers and other information.

Harvard Professional Publisher is a full-powered page composition program offering the superior typographic quality needed to produce professional-

looking documents on an IBM PC or compatible.

"When people come into the forum with questions, I try to give them an overview of the features of the products for their applications," Lamontagne says. "If they need more help, they can leave messages in the forum." The Software Publishing Forum currently offers a desktop publishing area in Data Library 8. Examples of newsletters and paint files have been uploaded. A new data library with technical tips will be offered in the Harvard Professional area.

Hewlett-Packard Co., Microsoft Corp. and Aldus Corp. have formed an alliance to market desktop publishing products. These products are represented and supported in online forums.

"We are trying to be a definitive source of answers for users of products," says Bill Crow, Hewlett-Packard spokesman. "We provide complete support for the Hewlett-Packard product online." This support includes desktop publishing products. Data Library 5 covers the LaserJet printer, fonts and various drivers. Data Library 4 includes printer fonts, utilities and LaserJet driver files.

"Desktop Publishing is a new product," Crow says. "If a user of H-P products has a question in the officially supported Hewlett-Packard Forum, we attempt to help." Hewlett-Packard reports that the most common desktop publishing questions concern the LaserJet's compatibility with software packages. To access the Hewlett-Packard Forum, type GO HP at any CompuServe prompt.

"One of our most active areas is the public-domain software library," Crow says. "The Aldus Forum also offers direct support."

The Aldus Forum data libraries include "Forum Help and Info," "Mac PageMaker Notes," "Mac Templates/Fonts," "Mac Utility Toolbox" and "PC PageMaker Notes." To access the Aldus Forum, type GO ALDUS at any CompuServe Information Service prompt.

Additional desktop publishing information may be found in the Microsoft Connection (GO MSCON). Most of the usage consists of problem reports, according to Ted Reindal, forum administrator. "Microsoft Word 3.00 is proba-

bly the best thing we have in that area," Ted says. "We are willing to provide as much information as possible about the products we have available to anyone visiting our forum and would welcome discussion on this topic. We intend to pursue this market via Windows, PageMaker and the H-P LaserJet series."

The Macintosh Business Forum has a desktop publishing/word processing section containing a variety of files including an envelope-printing program for the LaserWriter, job-estimating programs for printers, and fonts ranging from Venice-like handwriting to modern type.

Many programs help subscribers use PageMaker with already formatted examples. Some programs will put rulers on the screen. To access this forum, type GO MACBIZ at any CompuServe Information Service prompt and select Subtopic 7, "Desktop Publishing and Word Processing." Then access the data library or read messages.

"If someone is using the Macintosh with a LaserWriter, the Macintosh Business Forum can save a lot of time and money," says Neil Shapiro, MAUG forum administrator. "You also can use programs such as online fonts that are similar to ones sold commercially."

"Desktop Publishing is one of the cornerstones of the Macintosh community," Shapiro says. "We expect it will become more important with the new Macintosh II and this will be reflected in the forum."

MicroPro is planning to release a new desktop publishing product, code-named Prism, this year. As information about Prism becomes available, it will be released in the MicroPro Forum, according to Mojo Jones, forum administrator.

Ashton-Tate also will be releasing a new desktop publishing product for the IBM. The Ashton-Tate Forum will have support information when the product is released.

To keep up on other areas on the CompuServe Information Service that offer desktop publishing information, type FIND DESKTOP PUBLISHING at any prompt. Also, watch What's New for announcements of new products in this area.

— Denise Erwin



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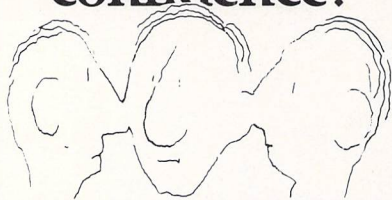
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U P D A T E

Software Sources Online at The Mall

Are you looking for the latest in word processing programs or investment packages? Can you take on the experts in bridge, backgammon or chess? At The Electronic Mall thousands of programs are at your fingertips.

Here's a selection of merchants offering software online:

Computer Express

This California-based company offers software for the Apple, Amiga, Commodore, IBM and Macintosh personal computers.

Computer Express offers word processing programs including Word Perfect, and financial planning programs such as Sylvia Porter's Financial Planner. You'll also discover a selection of Borland International packages, including Turbo Basic and Turbo Pascal. Term Paper Writer by Personal Choice Software and Spinnaker's Homework Helper, both tutorials for math and writing, are recommended for students.

You may request a free copy of Computer Express' complete catalog. All products featured in the catalog can be ordered through the electronic order blank. To visit Computer Express, type GO CE.

Icon Review

Macintosh owners are invited to visit Icon Review for the latest in Macintosh software, hardware and accessories. Recommended programs include Filemaker Plus: Databases and Forms, MacLink Plus, Exchange PC Files and Easy 3D: Three-Dimensional Graphics.

Subscribers can also request a free copy of Icon Review's comprehensive four-color catalog. To order your catalog, and to shop Icon Review online, type GO IR.

Investment Software

This Mall merchant specializes in investment software for the IBM PC and compatible personal computers. A limited line of software is also offered for the Macintosh.

More than 60 investment packages, ranging from complex programs for the professional to simulations for the arm-chair investor, are available. New and recommended is Option Strategy Tutor, a menu-driven tutorial that helps you learn how to use options as a trading strategy. Also recommended, and se-

lected by both PC Magazine and Forbes as a top investment program, is Metastock.

For money-making software from Investment Software, type GO IS.

Marymac Industries Inc.

Tandy owners will want to browse Marymac's online catalog of software. A wide range of programs, including Filepro 16 and Accountmate, is offered online. You'll also discover Scripsit, a word processing package for the Tandy 1000 or 2000.

Marymac also carries games for Tandy personal computers. Recommended programs include *Kings Quest 3*, *Flight Simulator*, *Gato* and *Silent Service*.

To order Tandy software at discount prices at Marymac Industries, type GO MM.

Menu International

Menu International, an information and ordering service with computer software, offers information on more than 75,000 software packages. Order a SoftReport, a hardcopy or EasyPlex copy of information from Menu International's extensive collection. Each SoftReport is \$25, credited toward your first purchase of a software package. The MacGuide, AppleGuide and IBM-Guide can be ordered online for \$4.95. You can also order The Software Catalog, a comprehensive 2,000-page volume, for \$79. A \$20 rebate on your first software order is included.

Menu International's Mall store also offers an online catalog. For software from A to Z, type GO MNU.

Software Discounters of America

Software Discounters of America offers software for the Commodore, Atari, Atari 520ST, IBM, Apple and Amiga personal computers, all at discount prices.

SDA's entertainment line includes state-of-the-art sports simulations by Gamestar: football, baseball and basketball. Other sports programs include sailing, bowling, chess, bridge and backgammon. SDA's home utility software selection is extensive, including software by TimeWorks.

Subscribers are invited to visit SDA's Bargain Basement, where every item is priced under \$10. When you visit SDA's Mall store, be sure to read the monthly Newsflash. To discover SDA's world of software, type GO SDA.

ELECTRONIC MALL DIRECTORY

APPAREL/ACCESSORIES

APC Apparel Concepts for Men
GD Gold Connection
IO Inside * Outside
MJ Milkins Jewelers

AUTO

AV AutoVision
BU Buick Magazine
CHV Chevy Showroom
DU Dutchess CompuLease
FMC Ford Motor Co.

BOOKS/PERIODICALS

BAL Ballantine Books
DJ Dow Jones & Co.
MH The McGraw-Hill Book Co.
MER Mercury House
BK Small Computer Book Club
WB Waldenbooks

COMPUTING

ATN Aaxion Tech Network
CE Computer Express
GL Great Lakes Business Forms
HTH The Heath Co.
IBM IBM Canada Ltd.
IR Icon Review
IS Investment Software
MM Marymac Industries Inc.
MNU Menu International
NT Nitro Micro
SAF Safeware
SDA Software Discounters of America
VC Virtuosonics Corp.
WOC CDA World of Computers

FINANCIAL

BSW Bowers, Schumann & Welch
INC Business Incorporating Guide
DWR Dean Witter Reynolds
FT First Texas Savings
HRB H&R Block
MU Max Ule Discount Brokerage

GIFTS/NOVELTIES

AK Alaska Teleshopper
BG BannerGram By Mail
HI Hawaiian Isle
JE J.E. Smith Brassware
LM Lincoln Manor Baskets
TF Tooth FairyLand

GOURMET/FLOWERS

COF Coffee Emporium
FTH Fifth Avenue Shopper
FFS Florida Fruit Shippers
SIM Simon David
WK Walter Knoll Florist

HEALTH/BEAUTY

BS B&K Beauty Supplies
MN Merle Norman Cosmetics

HOBBIES/TOYS

HC Hobby Center Toys
TSR TSR Hobby Shop

HOME/APPLIANCES

BD Black & Decker Powerline Network

MERCHANDISE/ELECTRONICS

ATT AT&T
ORD CompuServe Store
CFD Crutchfield
GC Garden Camera & Electronics
SV Stereo/Video Factory

MUSIC/MOVIES

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EMC Express Music
MV Magic Castle Video
MAO Music Alley Online

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EX Executive Stamper
OM Office Machines & Supplies

ONLINE SERVICES

EF EF Hutton
NN NewsNet
OA Official Airline Guides Inc.

PREMIUM MERCHANTS

AXM American Express Merchandise

SPORTS/LEISURE

BB Bike Barn
RR Rin Robyn Pool 'N Patio

TRAVEL

AF Air France
AT Ameropa Travel
MT Moment's Notice

Changing Your Password

The CompuServe Information Service urges its customers to change their passwords at least once a month.

The password should be a minimum of eight characters composed of two unrelated words separated by a symbol, for example: HOUSE*MAGNET.

To find out how to change your password, type GO PASSWORD.

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GO OLI or circle 10 on the Reader Service Form.

Ask Customer Service

Q: What is IQuest?

A: IQuest is a comprehensive information and research service made up of more than 800 databases. IQuest offers two simple methods for finding information: IQuest I and IQuest II. IQuest I guides you via a series of menus to the database that best suits your area of interest. IQuest II allows you to choose the database that you wish to access and to bypass the menus.

There are two types of databases available in IQuest: full-text and bibliographic. Full-text databases show an entire article. Bibliographic databases contain complete reference information.

You can obtain a complete listing of all the databases in IQuest by typing GO IQUEST at any prompt and choosing menu option 4, "IQuest Database Directory."

Q: What is Einstein?

A: Einstein is an information and research service similar to IQuest, but Einstein is designed for teachers and students. Einstein offers both bibliographic and full-text articles on subjects such as art, science, business and technology. Einstein is available from 5 p.m. to 8 a.m. (local time) Monday through Friday, and 24 hours on Saturday and Sunday. Also, through August 31 Einstein will be available 24 hours a day.

Q: When I search in one of the research services, I am sometimes offered an abstract and other times the full article. What's the difference?

A: An abstract is a summary of the full article. By getting the abstract you will be able to find out what the article is about, but will not get all the detail that the article offers. You might think of an abstract as a unbiased review of the article: it tells the main message of the article, but doesn't give an opinion of it.

Q: If I use information from an article that I found on CompuServe (from Grolier, IQuest or Einstein), how would I list it in the footnotes and bibliography of my report?

A: Information obtained on CompuServe is referenced like any other source. If the information you obtain from IQuest, for example, is from a newspaper, you would reference the source as a newspaper source. If it is from a journal, you would reference it as a journal source.

Q: How do I search in Grolier's Academic American Encyclopedia? I am not clear about when to use the SE command.

A: A good thing to remember is that the SE command is used when you do NOT have a "Search Term:" prompt on the screen. To illustrate this with real commands, if you type GO AAE to get to the encyclopedia and then select item 2, "Access the encyclopedia," you will receive a help screen. This screen tells you that you will see the "Search Term:" prompt only once. After that first screen, you will receive the first "Search Term:" prompt that was mentioned above. (A note: the SE command won't work on the help screen before you see the "Search Term:" prompt.)

After you have researched a topic by entering it at the first "Search Term:" prompt, then you may use the SE command (followed by the topic on the same line; for example, "SE MAMMAL") by entering the command at the prompt at the bottom of your screen.

Q: What areas of CompuServe will help my family to learn about colleges and financial aid?

A: CompuServe has many services to help you. You may want to access Peterson's College Guide by typing GO PETERSONS at any prompt. This database contains profiles of more than 3,000 colleges in the United States and Canada. In addition, the Students' Forum welcomes students of all ages. The forum administrators and members welcome your questions and comments. Type GO STUFO at any prompt to join this forum.

Q: What services does CompuServe offer for the disabled?

A: CompuServe offers services for the disabled and for those interested in the topic. The Disabilities Forum is an area that allows all subscribers to meet and exchange information on any topic related to disabilities. Type GO DISABILITIES at any prompt. Another resource for the disabled is the Handicapped Users' Database. It contains information on hardware and software for disabled computer users, organizations for the disabled, news of interest, a reference library and rehabilitation research. Type GO HUD at any prompt. Finally, the Health Forum is an online resource for your health-related questions. Professionals and laypeople are both online in this area

frequently. Type GO HCM at any prompt to access the Health Forum.

— Lisa Cress and Mark Gunderson

These answers and more are available in Customer Service's Question & Answer Database. You can find answers to questions about billing, logging on, using forums, sending EasyPlex messages, using the Personal File area, setting up a Personal Menu and more. GO QUESTIONS

Gift of Time

Online Today offers subscribers the chance to write a 200-word essay on how they use CompuServe's Information Service.

Your essay should be typed double-spaced and sent to *Online Today*, CompuServe Incorporated, 5000 Arlington Centre Blvd., P.O. Box 20212, Columbus, OH 43220, or by an EasyPlex message to 70003,3246. Please include your full name, address and User ID number.

If we use your column, you will receive 10 hours of standard service connect time (a \$60 value) and a byline.

Youth at Home on CompuServe

I am 14 years old and nighttime finds me at my computer using CompuServe. If I am not using the CB Simulator to talk on the teen channel, I am playing *You Guessed It!*, *MegaWars* or another game with people from around the country. I enjoy searching for gifts in The Electronic Mall and checking out the latest football, baseball and basketball scores online.

I also use CompuServe to locate programs for my Color Computer. The data libraries in the computer forums have thousands of programs.

CompuServe is easy to use and well worth the money.

Ken Saltzman
Tucson, Ariz.

What's Going On?

If you want to know what's going on around CompuServe, check into *Online Today Electronic Edition*. Here you'll find constantly revised news for and about the CompuServe community. GO OLT-50 from any prompt on the CompuServe Information Service.

ONLINE
T O D A Y

Utility Files Added to Computer Forums

The data libraries in CompuServe's forums are filled with thousands of programs and textfiles. The following are a few of the files uploaded to the data libraries in recent months. For a more up-to-date list of uploads, check the "Uploads" columns in *Online Today Electronic Edition* by typing GO OLT-3700 at any CompuServe Information Service prompt. New columns are added twice monthly.

AMIGA FORUM

(GO AMIGAForum)

Text File Aide — A simple CLI program that allows any textfile to be loaded into the Amiga EDF editor. It strips out all binary characters, converts carriage returns to line feeds, splits lines that are too long and more. File MKED.ARC in Data Library 9.

Print Driver Program — A collection of nearly every print driver for the Amiga to drive printers ranging from the Alphacom to the Xerox. Of particular benefit to user groups and Amiga dealers. File DRIVEM.ARC in Data Library 11.

Terminal Program — A small BASIC terminal program for new users only. Contains download feature. Includes step-by-step guide for getting started on CompuServe. File NEWUSR.MSB in Data Library 4.

ATARI 16-BIT FORUM

(GO ATARI16)

Screen Saver — A new version of ScreenSaver. It works automatically to shut down the screen after a period of time. Works in all resolutions. File SCRSV.ARC in Data Library 3.

Atari ST Shell — A shell for Atari ST computers that contains more than 50 built-in commands and more. File GULAM.ARC in Data Library 3.

BROADCAST PROFESSIONAL FORUM

(GO BPFORUM)

Shock Radio — The Federal Communication Commission's notice on the policy for enforcing prohibitions on broadcasting obscene and indecent material, including the action against three radio stations accused of "shock radio." File FCC725.NOT in Data Library 9.

TV and Film Jobs — A primer on what producers look for and what can help you get into the freelance areas of film and television. File FRLNCE.TXT in Data Library 5.

COMMODORE ART/GAMES FORUM

(GO CBMART)

SID Directories — Names and descriptions of all the SID music files written by John Mackey in these respective libraries. Files MACKY2.DIR in Data Library 2 and MACKY5.DIR in Data Library 5.

GEOS — Data Library 13, a new Data Library for GEOS Berkeley Softworks' Commodore 64 "Graphic Environment Operating System." The library is now ready for CBMART members to share their own or known public domain GEOS-converted sequential files.

Graphic Assault System — A graphics enhancement utility for the C128 by Bruce Bowden of Heuristics. Menu driven. File GAS128.IMG in Data Library 10.

Adventure Game — Dungeon Realm, a D&D simulation by Britt Froemel. You try to navigate a dungeon, fight and gain treasures. Files DUNGEON.BIN, D1.BIN, D2.BIN, D3.BIN and D4.BIN in Data Library 9.

EPSON FORUM

(GO EPSON)

Communicator — An executable file for Apples or Apple-compatible computers to communicate with the PX-8 through FLINK or Portable Wordstar. File EPSAPL.COM in Data Library 1.

FISHNET

(GO FISHNET)

Pond Algae — A textfile explaining to owners of koi and goldfish ponds how to control algae growth in their ponds. Steve Meyer, an expert on goldfish and koi, explains the causes of algae growth and the solutions. File DM-98.TXT in Data Library 4.

IBM COMMUNICATIONS FORUM

(GO IBMCOM)

One to One — Version 2.0 of ONE to ONE, a shareware communications package from Digital Transit that allows two users to exchange files and "chat" at the same time. File 121-V2.ARC in Data Library 3.

IBM SOFTWARE FORUM

(GO IBMSW)

Memory Mapper — Version 1.2 of PMAP, Chris Dunford's memory mapper. Documentation explains DOS' memory allocation chain. File PMAP.ARC in Data Library 1.

Menu Maker — Yet Another Menu Maker, a program that allows you to create a menu for starting your applications on hard disk systems. Features customized menus, scrollable submenu

windows, password protection, time and date log of usage, point and shoot type interface, changeable color and borders and more. File YAMM40.ARC in Data Library 1.

INVESTORS' FORUM

(GO INVFORUM)

LaLoggia Column — Transcripts of a bi-weekly stock market analysis column by Charles LaLoggia, publisher of the *LaLoggia Market Letter*. To see the columns, type BRO LOGG* at the Data Library 8 prompt.

Bond Analyzer — A public domain program for the IBM and MS-DOS computers, which is a bond analyzer for corporates, T-bills and T-bonds. File BONDS.ARC in Data Library 10.

MAUG™ APPLE II/III FORUM

(GO APPLE)

Home Accounting — Data Library 1, ACCTNG.DOC, documentation for a home accounting system contained in five other files in this data library. Read this textfile first before downloading associated files. The program requires an Apple IIc or enhanced IIe or a IIgs, PRODOS BASIC and two floppies, a hard drive or UNI-3.5 drive.

PRODOS Patch — A program to patch PRODOS versions 1.1.1, 1.2, 1.3 and 1.4 to fix the known bugs. File PATCHP.FP in Data Library 1.

Scratchpad — A CDA that produces a scratchpad for writing notes. Notes can be saved and loaded from either PRODOS 16 or PRODOS 8. File NOTPAD.POSM in Data Library 6.

MAUG™ MAC USERS FORUM

(GO MACUS)

Text Analysis — TextCount, a desk accessory that performs a simple analysis on a text document. It counts words as well as sentences and paragraphs and calculates the average number of words per sentence. File TXTCNT.PIT in Data Library 2.

Popup Menu — Creates a hierarchical popup of the menu bar anywhere on the screen with CMD-Shift click. File POPUP.PIT in Data Library 3.

TANDY PROFESSIONAL FORUM

(GO TRS80PRO)

Borland Help — Instructions for getting Borland Superkey and other Borland products to co-exist with the Tandy 1000 keyboard. File BOR.TXT in Data Library 5.

David Peyton co-authored How to Get the Most Out of CompuServe and Advanced CompuServe For IBM PC Power Users. His CompuServe User ID number is 76703,244.

S U B J E C T I N D E X

* Current as of July 1, 1987.

The CompuServe Information Service Subject Index provides a list of the communication and information services available online, and it is updated continually. Refer to the most recent index of services online by entering **GO INDEX** at any prompt.

Use the most direct route to reach a service by entering **GO** followed by the Quick Reference Word provided in the index. Enter this command at any online prompt.

Find the services available under a topic of interest by entering **FIND** and the topic at any online prompt. For example, if you would like to see what services are offered concerning travel, enter FIND TRAVEL. You will receive a list of the services related to travel and the Quick Reference Words to proceed to each area.

COMPUTERS AND TECHNOLOGY

Personal Computing Forums — Hardware

Amiga Forum
Apple Users Group
Apple Developers Forum
Apple II and III Forum
Apple User Groups Forum
Macintosh Business Forum
Macintosh Users Forum
Atari Forums
Atari 16-Bit Forum
Atari 8-Bit Forum
Atari Developers Forum
Commodore Users Network
Commodore Arts and Games Forum
Commodore Communications Forum
Commodore Programming Forum
Commodore Service Forum
DEC Users Network
DEC PC Forum
PDP-11 Forum
VAX Forum
Epson Forum
Heath Users Group
Hewlett-Packard Series 100 Forum
IBM Users Network
IBM Communications Forum
IBM Hardware Forum
IBM Junior Forum
IBM New Users Forum
IBM Software Forum
Kaypro Forum
OS9 Operating System Forum
Color Computer Forum
LDOS/TRSDOS6 Forum
Model 100/Portables Forum
Tandy Professional Forum
Texas Instruments Forum

Personal Computing Forums — Software/Languages

AI EXPERT Magazine
Ashton-Tate Forum
Autodesk Forum
Borland International Forum
CADRE Forum
Computer Language Magazine
CP/M User Group
Computer Club Forum
Computer Consultants Forum
Computer Training Forum
Digital Research Forum
Forth Forum
LOGO Forum
Lotus Forum
1-2-3 Software Forum
Jazz Software Forum
Symphony Software Forum

GO COMPUTERS

GO AMIGAForum
GO MAUG
GO APPDEV
GO APPLE
GO APPUG
GO MACBIZ
GO MACUS
GO ATARI
GO ATARI16
GO ATARI8
GO ATARIDEV
GO CBMNET
GO CBMART
GO CBMCOM
GO CBMPRG
GO CBMSER
GO DECUNET
GO DECPC
GO PDP11
GO VAXSIG
GO EPSON
GO HEATHUSERS
GO HP
GO IBMNET
GO IBMCOM
GO IBMHW
GO IBMJR
GO IBMNEW
GO IBMSW
GO KAYPRO
GO OS9
GO COCO
GO LDOS
GO M100SIG
GO TRS80PRO
GO TIFORUM

LDOS/TRSDOS6 Forum
Living Videotext Forum
MicroPro Users Forum
Microsoft Forum
Pascal Forum
Programmers Forum
Software Publishing Forum
Whole Earth Software Forum

Electronic Publications and Other Interests

Antic Online
Apples Online
DR. JOB
Digital Research Inc.
Dr. Dobb's Journal
Family Computing Magazine Electronic Edition
IQuest — Online Reference Resource
Microsearch
Online Today
Personal File Area
Software Publishing Online
Texas Instruments News
VIDTEX™ Communication Software
World of Lotus

GO LDOS
GO LVTForum
GO MICROPRO
GO MSOFT
GO MUSUS
GO PROGSIG
GO SPCFORUM
GO WHOLEEARTH

GO ANTIC
GO AOL
GO DRJ
GO DRI
GO DDJ
GO FAM
GO IQUEST
GO MICROS
GO TODAY
PER
GO SPC
GO TINEWS
GO VIDTEX
GO LOTUS

COMMUNICATION

CB Simulator (Computer Conferencing)
CB Society
Directory of Information Service Subscribers
EasyPlex Electronic Mail
National Bulletin Board

Communication-Related Forums

Citizen's Band Interest Group
HamNet Ham Radio Network
Telecommunications Forum

GO COMMUNICATE

GO CB
GO CUPCAKE
GO DIRECTORY
GO EASYPLEX
GO BULLETIN

GO CBIG
GO HAMNET
GO TELECOMM

NEWS, WEATHER, SPORTS

AP Sports Wire
Associated Press Videotex Wire
Business Wire
Computer Sports World
Executive News Service
Hollywood Hotline
IQuest — Online Reference Resource
ONLINE TODAY Electronic Edition
Sports News
St. Louis Post-Dispatch
Weather Reports, Forecasts, Maps

News and Sports Forums

Auto Racing Forum
Journalism Forum
National Issues and People Forum
Online CompuServe Connection
Outdoors Forum
Sailing Forum
Sports Forum

GO NEWS

GO SPORTS
GO APV
GO TBW
GO CSW
GO ENS
GO HOLLYWOOD
GO IQUEST
GO ONLINE
GO SPORTS
GO SPD
GO WEATHER

GO RACING
GO JFORUM
GO ISSUESFORUM
GO COMPUERVE
GO OUTDOORFORUM
GO SAILING
GO FANS

TRAVEL SERVICES

ABC Worldwide Hotel Guide
Adventures in Travel
American Express® ADVANCE
Discover Orlando
Official Airline Guide EE
Rocky Mountain Connections
State Department Travel Briefings
Sun 'N Sand Vacations
TravelVision
Travelshopper
Visa Advisors
West Coast Travel
What's New in Travel
WorldWide Exchange

Travel-Related Forums

Florida Forum
Travel Forum

GO TRAVEL

GO ABC
GO AIT
GO AMEX
GO ORLANDO
GO OAG
GO ROCKIES
GO STATE
GO SNS
GO TRV
GO TWA
GO VISA
GO WESTCOAST
GO WNT
GO WWX

GO FLORIDA
GO TRAVSIG



Aviation Services

Airline Flight Information	GO FLIGHTS
Aviation Forum	GO AVSIG
Aviation Safety Institute	GO ASI
Aviation Services	GO AVIATION
Flight Planning and Weather Briefings	GO EMI
Service Difficulty Reports	GO ASI
Weather Maps	GO MAPS
Weather Reports and Forecasts	GO BRIEF

SHOPPING SERVICES

Comp-u-store Online	GO CUS
CompuServe Product Ordering	GO ORDER
CompuServe SOFTEX Software Sales	GO SOFTEX
New Car Showroom	GO NEWCAR
The Electronic Mall™ (selected merchants)	GO MALL

Apparel/Accessories

Apparel Concepts for Men	GO APC
Inside * Outside	GO IO
Milkins Jewelers	GO MJ
Woodstock Leather	GO BAG

Auto

AutoVision	GO AV
Chevy Showroom	GO CHV
Ford Motor Company	GO FORD

Books

Ballantine Books	GO BAL
McGraw-Hill Book Company	GO MH
Mercury House	GO MER
Small Computer Book Club	GO BK
Waldenbooks	GO WB

Computing

Computer Express	GO CE
Great Lakes Business Forms	GO GL
Heath Company	GO HTH
IBM Canada Ltd.	GO IBM
Icon Review	GO IR
Investment Software	GO IS
Marymac Industries Inc.	GO MM
Menu International	GO MNU
Software Discounters of America	GO SDA
World of Computers	GO WOC

Financial

Business Incorporating Guide	GO INC
Dean Witter Reynolds	GO DWR
H&R Block	GO HRB
Max Ule Discount Brokerage	GO MU

Gifts/Gourmet

Alaska Teleshopper	GO AK
Coffee Emporium	GO COF
Executive Engraver	GO EX
Fifth Avenue Shopper	GO FTH
Florida Fruit Shippers	GO FFS
Hawaiian Isle	GO HI
Lincoln Manor Baskets	GO LM
Simon David	GO SIM
Tooth FairyLand	GO TF
Walter Knoll Florist	GO WK

Health/Beauty

B & K Beauty Supplies	GO BS
Childbirth Center	GO HCM-10
Merle Norman Cosmetics	GO MN

Home/Leisure

Bike Barn	GO BB
Don's Dollhouse	GO DD
Hobby Center Toys	GO HC
Music Alley Online	GO MAO
Rin Robyn Pool & Patio	GO RR
TSR Hobby Shop	GO TSR
Vacuum Advance	GO VCS

Merchandise/Electronics

AT&T	GO ATT
Crutchfield	GO CFD
Garden Camera & Electronics	GO GC
Office Machines & Supplies	GO OM
Sears, Roebuck & Co.	GO SR
Stereo/Video Factory	GO SV

Online Services

EF Hutton	GO EF
NewsNet	GO NN
Official Airline Guides	GO OA

Periodicals

Dow Jones & Co	GO DJ
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Premium Merchants

American Express	GO AXM
Neiman-Marcus	GO NM

Records/Movies

Express Music CDs	GO EMC
Magic Castle Video	GO MV
RCA Direct Marketing	GO RC

Travel

Air France	GO AF
Ameropa Travel	GO AT

MONEY MATTERS AND MARKETS

Banking Services	GO MONEY
Bond Interest Payments	GO BANKING
Bond Prices & Volumes Since 1973	GO BONDS
Brokerage Services	GO BONDS
Charts to Analyze Securities Performance	GO BROKERAGE
Commodity Market News & Analysis from News-A-Tron	GO TREND
Commodity Pricing & Volume Information Since 1979	GO NAT
Company Information from Disclosure II	GO CPRICE
Company Information from Standard & Poor's	GO DISCLOSURE
Diamond Information from Rappaport's	GO S&P
Diamond Service	GO RDC
Downloading Interfaces for Company Data	GO IQINT
Downloading Interfaces for Pricing Data	GO MQINT
Earnings & Growth Estimates from the I/B/E/S	GO IBES
Earnings Estimates & Sales Projections from Value Line	GO EARNINGS
Economic Outlooks from Money Market Services	GO MMS
Financial Futures Information	GO COMMODITIES
Financial Statements from Disclosure II	GO DISCLOSURE
Financial Statements from Value Line	GO VLANN

S U B J E C T I N D E X

Foreign Currency Exchange Rates Since 1973
 Information USA
 Insurance Information
 Interest Rate Outlooks from Money Market Services
 Market & Industry Indexes Since 1973
 Market and Industry Index Lookup
 MicroQuote II (Program Prompt)
 Mutual Fund Distributions
 Mutual Fund Services
 Mutual Funds — Noload Fund Descriptions
 Mutual Funds Net Asset Values & Offered Prices
 Options Prices & Volumes for Recent Contracts
 Ownership Information from Disclosure/Spectrum
 Portfolio Valuation
 Real Estate Appraisal
 Screening — Company Information from
 Disclosure
 Securities Symbol Lookup
 Security Screening (on Investment Criteria)
 Spreadsheet Interfaces for Securities Data
 Stock Market Highlights
 Stock Prices & Volumes Since 1973 (Multiple Issue)
 Stock Prices & Volumes Since 1973 (Single Issue)
 Stock Quotes for the Current Day
 (Delayed 20 Minutes)
 Stock Splits & Dividends
 Tax & Benefit Information from the Social Security
 Administration
 U.S. Dollar Outlooks from Money Market Services

Online Banking and Brokerage Services

Business Banking Direct from PSFS
 Max Ule & Co. (Brokerage Services through
 Tickerscreen)
 NCNB National Bank, Charlotte, N.C.
 PSFS, Philadelphia
 Quick & Reilly (Brokerage Services
 through Quick Way)
 Rappaport Diamond Brokers
 Southeast Bank, Miami, Florida
 Unified Management (Mutual Fund Services from
 Liquid Green)
 United American Bank, Memphis

Financial and Investment Forums

Ashton-Tate Support Library
 Ask Mr. Fed Forum
 Financial and Investment Forums
 Investors Forum
 World of LOTUS (LOTUS 1-2-3, Symphony, Jazz)

GO QUOTES
 GO INFOUSA
 GO INSURANCE
 GO MMS
 GO QUOTES
 GO INDICATORS
 GO MQUOTE
 GO DIVIDENDS
 GO FINANCE
 GO NOLOAD
 GO QUOTES
 GO OPRICE
 GO DISCLOSURE
 GO PORT
 GO REAL ESTATE

GO COSCREEN
 GO SYMBOLS
 GO SCREEN
 GO INTERFACES
 GO MARKET
 GO QSHEET
 GO PRICES

GO QQUOTE
 GO DIVIDENDS

GO SSA
 GO MMS

GO BBD

GO TKR
 GO NCNB
 GO PSFS

GO QWKWAY
 GO RDC
 GO SEB

GO UMC
 GO UAB

GO ASHTON
 GO ASKFD
 GO FINFORUM
 GO INVFORUM
 GO LOTUS

BUSINESS MANAGEMENT AND REFERENCE

AP Videotex, Business
 American Association of Medical Systems
 and Informatics Communications
 American College of Obstetricians and
 Gynecologists
 American Express® ADVANCE
 Aviation and Flight Planning
 Business Wire
 Calculate Net Worth
 Checkbook Balancer
 DR. JOB
 EdVENT II
 Executive News Service
 Fedwatch Newsletter
 IQuest — Online Reference Resource
 Independent Insurance Agents Association
 Information USA
 Int'l Entrepreneurs' Network
 Loan Amortization
 Microsearch
 PaperChase (MEDLINE)
 Rare Disease Database
 Social Security Administration
 Stevens Business Reports
 SuperSite Demographic Information
 U.S. Government Publications
 World-Wide Investment System

GO BUSINESS

GO APV

 GO AAMS

 GO ACOG
 GO AMEX
 GO AVIATION
 GO TBW
 GO FINTOL
 GO CHECKBOOK
 GO DRJ
 GO EDVENT
 GO ENS
 GO MMS
 GO IQUEST
 GO INSURANCE
 GO INFOUSA
 GO USEN
 GO FINTOL
 GO MICROS
 GO PAPERCHASE
 GO NORD
 GO SSA
 GO SBR
 GO SUPERSITE
 GO GPO
 GO REAL ESTATE



Industry and Professional Forums

American Association of Medical Systems
 and Informatics
 Broadcast Professional Forum
 Communications Industry
 Computer Consultants Forum
 Consumer Electronics Forum
 Int'l Entrepreneurs' Network
 Journalism Forum
 Legal Forum
 Military Veterans Services
 Public Relations and Marketing
 Safetynet Forum
 Telecommunications
 Working From Home Forum
 Writers and Editors

GO MEDSIG
 GO BPFFORUM
 GO MEDIA
 GO CONSULT
 GO CEFORUM
 GO USEN
 GO JFORUM
 GO LAWSIG
 GO VETERAN
 GO PRSIG
 GO SAFETY
 GO TELECOMM
 GO WORK
 GO WESIG

HOME, HEALTH & FAMILY

Calculate Net Worth
 Checkbook Balancer
 HealthNet
 Healthcom
 Home Management
 Human Sexuality
 Independent Insurance Agents Association
 Information USA
 Loan Amortization
 National Satirist
 New Car Showroom
 Personality Profile
 Rare Disease Database
 Social Security Administration

GO HOME

GO FINTOL
 GO CHECKBOOK
 GO HNT
 GO HCM-455
 GO HOME
 GO HUMAN
 GO INSURANCE
 GO INFOUSA
 GO FINTOL
 GO KCS
 GO NEWCAR
 GO TMC-25
 GO NORD
 GO SSA

General Interest Forums

Aquaria/Fish Forum
 Astronomy Forum
 Comic Book Forum
 Consumer Electronics
 Disabilities Forum
 Family Computing Forum
 Food/Wine Forums
 Good Earth Forum
 Ham Radio Forum
 Literary Forum
 Model Aviation Forum
 Music Forum
 National Issues and People Forum
 Online CompuServe Connection
 Outdoors Forum
 Photography Forum
 Religion Forum
 Science Fiction Forum
 Space Forum
 Wit SIG

GO FISHNET
 GO ASTROFORUM
 GO COMIC
 GO CEFORUM
 GO DISABILITIES
 GO FAM
 GO FOOD
 GO GOODEARTH
 GO HAM
 GO LITFORUM
 GO MODELNET
 GO MUSICFORUM
 GO ISSUESFORUM
 GO COMPUSERVE
 GO OUTDOORFORUM
 GO PHOTOFORUM
 GO RELIGION
 GO SCI-FI
 GO SPACEFORUM
 GO WITSIG

S U B J E C T I N D E X

Working From Home

GO WORK

EDUCATION AND REFERENCE

Education

College Press Service
EdVENT II
Educational Products Information Exchange (EPIE)
Handicapped Users' Database
Multiple Choice
Peterson's College Guides
Rehabilitation Database
Science Trivia
Touch-Type Tutor
Whiz Quiz

Reference

Academic American Encyclopedia
Einstein
IQuest — Online Reference Resource
Information USA
SuperSite Demographic Information
U.S. Government Publications

Education Forums

Assoc. for Education in Journalism
and Mass Communications Forum
Assoc. for the Development of Computer-based
Instructional Systems Forum
Computer Training Forum
Disabilities Forum
Educational Products Information Exchange
Educational Research Forum
Educators Forum
Foreign Language Education Forum
LOGO Forum
Science and Math Education Forum
Space Forum
Students' Forum

GO EDUCATION

GO CPS
GO EDVENT
GO EPIE
GO HUD
GO MULTIPLE
GO PETERSON
GO REHAB
GO SCITRIVIA
GO MULTIPLE
GO WHIZ

GO ENCYCLOPEDIA
GO EINSTEIN
GO IQUEST
GO INFOUSA
GO SUPERSITE
GO GPO

GO AEJMC

GO ADCIS
GO DPTRAIN
GO DISABILITIES
GO EPIEFORUM
GO EDRESEARCH
GO EDFORUM
GO FLEFO
GO LOGOFORUM
GO SCIENCE
GO SPACEFORUM
GO STUFO

ENTERTAINMENT AND GAMES

Entertainment

Hollywood Hotline
Hollywood Hotline Art
Movie Reviewettes
National Satirist
RockNet
Soap Opera Summaries

Entertainment/Games Forums

CBIG (CB Interest Group)
Comic Book Forum
Music Forum
RockNet
Sci-Fi Fantasy Forum
Wit SIG

Games Forums-Information

Electronic Gamer™
Gamers' Forum
Gaming Connection
Multi-Player Games Forum

Adventure Games

CastleQuest
Flying Buffalo
House of Banshi
New Adventure
Original Adventure
Scott Adams Adventure Series

Board/Parlor Games

Astrological Charting
Baffle Word Game
Biorhythm Charting
Casino
Hangman

Fantasy Role-Playing Games

BlackDragon
Castle Telengard
Island of Kesmai

Multi-Player Games

Air Traffic Controller
Baffle Word Game
Casino
Flying Buffalo
Island of Kesmai
MegaWars I
MegaWars III
SeaWAR
SpaceWAR
You Guessed It!

Simulation/Sports Games

Advanced Digit Football
Air Traffic Controller
Football
Golf

Trivia/Thought Games

Multiple Choice
SHOWBIZQUIZ
Science Trivia Quiz
Whiz Quiz
Word Scramble
You Guessed It!

War Games

MegaWars I
MegaWars III
SeaWAR
SpaceWAR

GO GAMES

GO HOLLYWOOD
GO HHA
GO MOVIES
GO KCS
GO ROCK
GO SOAPS

GO EGFORUMS

GO CBIG
GO COMIC
GO MUSICFORUM
GO ROCK
GO SCI-FI
GO WITSIG

GO GAMECON

GO EGAMER
GO GAMERS
GO GAMECON
GO MPGAMES

GO ADVENT

GO CQUEST
GO BUFFALO
GO BANSHI
GO NEWADVENT
GO ORADVENT
GO ADAMS

GO BPGAMES

GO ASTROLOGY
GO BAFFLE
GO BIORHYTHM
GO CASINO
GO HANGMAN

GO FRPGAMES

GO BLACKDRAGON
GO CASTLE
GO ISLAND

GO MULTIGAMES

GO ATCONTROL
GO BAFFLE
GO CASINO
GO BUFFALO
GO ISLAND
GO MEGA1
GO MEGA3
GO SEAWAR
GO SPACEWAR
GO YGI

GO SSGAMES

GO ADFL
GO ATCONTROL
GO FOOTBALL
GO GOLF

GO TTGAMES

GO MULTIPLE
GO SHOWBIZ
GO SCITRIVIA
GO WHIZ
GO SCRAMBLE
GO YGI

GO WARGAMES

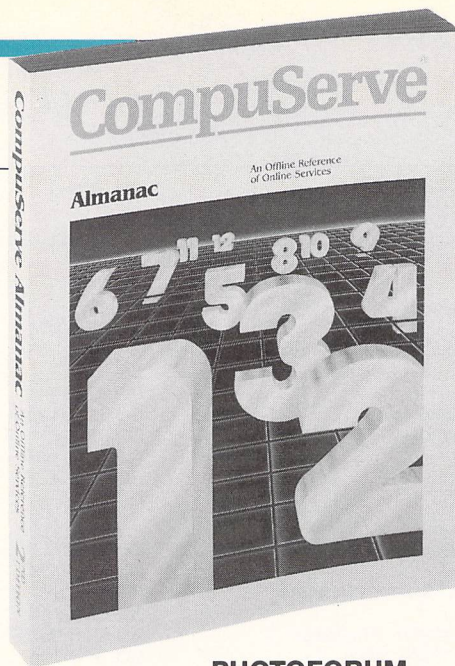
GO MEGA1
GO MEGA3
GO SEAWAR
GO SPACEWAR



Product Almanac Updates Keep Users Up-to-Date

Since the CompuServe Information Service is constantly changing, the following pages are provided as a supplement to the *CompuServe Product Almanac*. *Almanac* updates will appear periodically in *Online Today*.

The *CompuServe Product Almanac* is a handy reference source describing the forums and databases on the CompuServe Information Service. By checking the *Almanac*, you can navigate the service more quickly. To order a copy of the *CompuServe Product Almanac*, type GO ORDER.



3.3.3.7

Photography Forum

Shutterbugs of all levels, professional and amateur, can meet in the Photography Forum. Members can discuss photography equipment, film types, and camera techniques. Professionals can communicate with others in the business and share money-making ideas.

PHOTOFORUM

3.3.3.8

Picture Support Forum

The Picture Support Forum is dedicated to expanding the availability of online graphics. This forum is for exchange of information on how to create and upload graphics files, to provide graphics files for those without the ability to create them, and to maintain a display area of graphics files for downloading. Members can share information about their techniques, tips and traps.

PICS

3.3.5.4

Javelin Forum

Javelin Software's business analysis and reporting system uses a more structured approach to model building than the traditional spreadsheet. The Javelin Forum helps you take full advantage of Javelin's capabilities. These capabilities include the ability to "look behind the numbers" to determine where a specific number comes from and view problems in several ways including worksheets, formulas, and presentation-quality graphs. Members of Javelin Software Corp. are online to answer your questions and provide technical support.

JAVELIN

3.3.5.9

Monogram Software Forum

Users of Monogram's software products, including Dollars and Sense and Moneyline, can use this forum to exchange information and applications. The data libraries are managed by Monogram Software's technical support and analysis department. The libraries contain answers to commonly asked questions, as well as examples of stock transactions, billing applications, credit card management and payroll administration. Monogram's compatibility with IBM, Apple, Macintosh and Atari is also discussed.

MONOGRAM

3.3.6.1.2

Macintosh Business Forum

The MAUG Macintosh Business Forum is for Macintosh users in the business world. A variety of subjects are discussed in this forum including productivity software, spreadsheets, databases, desktop publishing, networks, and accounting.

MACBIZ

3.3.6.1.3**Apple Developers Forum****APPDEV**

The Apple Developers Forum is geared toward developers of software and hardware for Apple personal computers. Members can discuss tools such as languages, debuggers, editors and linkers, as well as hardware enhancements. The newsletters and tech notes provide up-to-date items on Apple products. Non-developers are welcome to join and take advantage of the data libraries.

3.3.6.9.6**PC Vendor Support Forum****PCVEN**

The PC Vendor Support Forum provides subscribers with support from multiple vendors of PC products. The vendors include ButtonWare (PC-File +, word processing, graphics and communication), Mansfield Software (KEDIT and REXX), the Software Group (Enable) and Bröderbund (entertainment and productivity software).

3.3.10.2**Aldus Forum****ALDUS**

If you're interested in desktop publishing and Aldus Pagemaker, you'll want to join the Aldus Forum. In addition to idea exchanges with other users, detailed information on new product releases is available. Libraries contain technical support notes, templates for design formatting, and uploadable public domain and shareware programs. The Aldus Forum is operated by the Aldus technical support staff, who will answer your questions within 24 hours.

3.3.10.5.7**Borland Language Products Forum****BORPRO**

If you are interested in learning more about programming with Turbo Pascal, Turbo Prolog, or other Borland International products, explore the Borland Language Products Forum. In this forum, you can participate in discussions with other members concerning these products and receive help from them. You can also work with other members on joint online projects.

3.3.10.19**Microsoft Connection (W)****MSCON**

The Microsoft Connection is operated by the Microsoft Product Support Group for all users of their software. Members can send questions directly to Microsoft or share information with other members. The common questions and answers section may resolve your problem on the spot. Additional features include product release announcements, training information and a directory of Microsoft centers around the world.

3.3.10.24**Software Publishing Online****SPC**

Software Publishing Co. was started by individuals who believe that busy professionals need productivity tools that are easy to use. Thus, SPC developed a family of integrated products that stress simple functionality. Their PFS (Personal Filing System) line includes a filing system, a report writer, a word processor and planner. Their Harvard Software line consists of project management software and the Harvard Professional Publisher. Subscribers can join the Software Publishing Forum to exchange ideas on SPC products and to keep up with the latest developments.

3.9**Convention Center™****CONVENTION**

The Electronic Convention Center™ allows subscribers to access any of CompuServe's special conferences from one place. You can view information on scheduled conferences and decide if you would like to attend. Information about each conference is displayed: general description, conference type, date and time, expected length and whether a reservation is required. A reservation, if needed, can be made at that time.

4.1.4**Sports Medicine****HRF-4794**

Jog, bike, swim or ski to the Sports Medicine Clinic. Information is available on basic exercise physiology, exercise testing, training, nutrition and the general risks versus benefits of exercise. Articles discussing specific sports give information on each sport's benefits, advantages, disadvantages and information on how to get started. You can keep track of your fitness efforts using the chart of energy costs for various activities.

4.1.5.1**Advanced Digital Football****ADF**

Armchair athletes, push aside that popcorn. The Digital Football League has drafted you to coach your team in a simulated contest. You can select your team, your opponent and level of coaching involvement. You can call offensive and defensive plays using established strategies, or be creative and invent your own.

4.4**OTC NewsAlert****OTCNEWS**

OTC NewsAlert is a database and clipping service that tracks activities that could affect stock prices of all large and small companies whose stocks trade over-the-counter. Investors, corporate information officers, and competitors can search both recent and historic articles featuring summary earning reports, large sales contracts, new products, acquisitions, takeovers, movements of large blocks of stocks by corporate insiders, and attempts to take companies privately. Also included is information on initial public offerings. Information is obtained from a variety of news services, from filings with the Securities and Exchange Commission, and from the companies themselves. OTC NewsAlert items can be searched by company name, stock symbol or topic. A clipping file can be set up through the Executive News Service to follow individual company and industry trends.

8.3.6**Interactive Chess****CHESS**

The ancient game of kings can now be played the modern way — interactively with other chess players from around the world. *Interactive Chess* consists of a parlor, a spectator gallery area, and several game tables. You can enter the parlor, watch others play, and when you are ready, you can play on the board displayed on your terminal. Whether you choose to watch or play, you may communicate with the opponents and gallery members during the game.

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Entrepreneurs Make Online Connections

Wanted: Creative, ambitious entrepreneurs equipped with the desire to succeed, the stamina to make it happen and the willingness to share their business advice with others. If you fit that description, you may want to join the 8,000 members of the International Entrepreneurs Network (GO USEN) for some lively online give-and-take plus access to more than 200 useful files in the forum's data libraries.

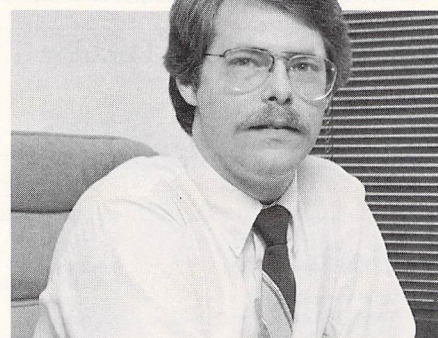
"Our members are extremely supportive of one another's efforts," says Forum Administrator Bruce Kullberg. "A lot of practical advice — including the names of valuable business contacts — is exchanged online. But our members aren't just those interested in starting companies. We bring together seasoned entrepreneurs and those just starting out, as well as those who can provide financing."

Members have many of their needs met via the forum's active message board and through the conferences scheduled from 8 to 10 p.m. EDT the first Tuesday of each month. Called "What's On Your Mind?," the conference gives members a chance to ask questions, raise issues and offer advice. According to Kullberg, US members who use the message board and conference area have in the past been joined by fellow entrepreneurs in Canada, Germany, France, the United Kingdom, Japan, Iceland, Indonesia and Malaysia. Usually scheduled as free-for-alls, conferences also occasionally feature guest speakers.

Data libraries — especially those featuring free software and sample business plans — are another big draw. "The most popular files are those containing outlines that can be applied to almost any business," Kullberg explains. "A restaurateur and a manufacturer might use the same financial outline, for example, but concentrate only on the parts applicable to their type of company."

Data Library 5 is the place to look for financial outlines and other issues related to cash flow, including charts, guidelines for creating projected budgets, and problems and solutions related to cash flow deficiencies. Also in Data Library 5 are files about how the new tax laws affect home-based and small businesses, as well as an easy reference chart on this topic.

For free business-related IBM and IBM-compatible software, look in Data



Entrepreneurs excel: Kullberg advises

Library 4 for PHOEBE, a prospective client-tracking system, and in Data Library 7 for a menu-driven payroll program that handles records for up to 68 employees and supports data on weekly, hourly and salary wages. "The payroll program is useful for all small businesses, but especially for restaurants," Kullberg says.

Three other data libraries provide regular newsletters. To read the monthly *International Entrepreneurs Network News* written by Kullberg, access Data Library 0 for timely updates on forum enhancements, tips for small businesses and free offers. In Data Library 4, the marketing and sales area, you'll find the bi-monthly publication *Sales and Marketing Ideas*. Written by business consultant Mark Sanborn, this newsletter provides information on selling techniques and marketing ideas.

Finally, for a guide on where to look for specific types of information, check into Data Library 6 and peruse the monthly *Information and Research Brokers of New England Newsletter*. Each issue addresses a different topic, such as what is offered by the various commercial databases. For an overview of what is in each of the forum's files, type DL followed by the library number and CAT for a catalog of topics (e.g., DL2 CAT) followed by the file number and CAT, for a cataloging of topics.

The information offered through data libraries, conferences and message boards provides members with a variety of ways to get what they need quickly and efficiently, according to Kullberg. "People tell me they always find the information they're seeking or the name of a contact who can help them succeed," he says. "The forum functions as a great vehicle for bringing together entrepreneurs and resources from around the world."

— Carole Houze Gerber

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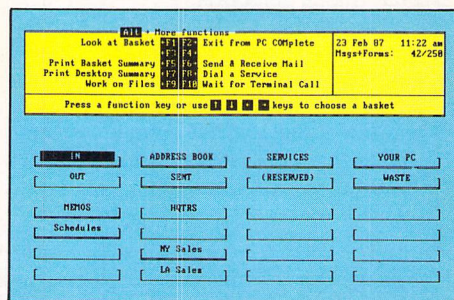
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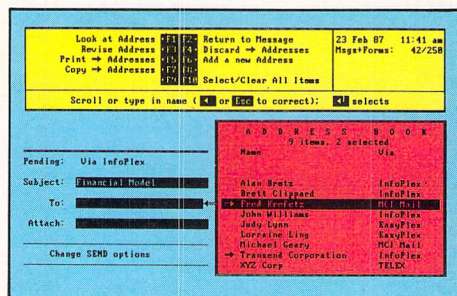
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"...easy to use, but sophisticated...a first time user can have it executing its first electronic mail session in half an hour..." DATAPRO RESEARCH CORP.

Business Briefs

OTC NewsAlert Adds SEC Filings

OTC NewsAlert has added SEC Schedule 13E filings that report public over-the-counter companies and issues going private under the "Schedule 13D" menu selection.

The weekly "OTC 10 Most Active" also has been added under the "Market Updates" menu selection. This table appears at market close each Friday and ranks the 10 OTC companies that traded the most issues during the week. To access OTC NewsAlert, type GO OTCNEWS.

ENS Now Offers Reuters and OTC NewsAlert

In addition to the Associated Press newswire and The Washington Post, the Executive News Service now features two premier financial news services: Reuters and OTC NewsAlert.

Reuters, an internationally-recognized news leader, is headquartered in London with bureaus and offices in 106 countries. With its extensive international infrastructure, Reuters offers CompuServe subscribers the latest news from Tokyo, New York, London and a host of other financial centers.

Designed primarily for the professional stockbroker, articles focus on individual companies, governments, foreign exchange markets, the US stock market and how other types of markets affect the price of a company's stock. Reuters also includes analysts' comments on company, industry and economic news.

Articles are varied and might include such things as the state of American farm credit, the status of US treasuries in London, the rise and fall of Japan's interest rates and even the value of the dollar in Kenya. Corporate news includes up-to-the-minute information on

earnings, dividends, acquisitions, executive changes and other pertinent facts and information.

Although Reuters offers many benefits, its greatest strength lies in the accuracy of the company's reporting, according to Jim Outman, Reuters' deputy manager of media services. "We offer thorough coverage of publicly traded companies and accuracy in news reporting. Because customers rely on our news reports to make investment decisions, it is important to provide accurate, in-depth information," he says. Reuters is the only financial news reporting service that offers complete coverage of all the international financial markets.

The entire selection of Reuters news articles can be scanned by headline; just type the command SCAN CURRENT RT. You can also instruct the system to automatically search and secure articles of particular interest and file them in an electronic "clipping folder" to read at your convenience. For complete instructions on using the Executive News Service, type GO ENS and select the first menu item, "Introduction to the Executive News

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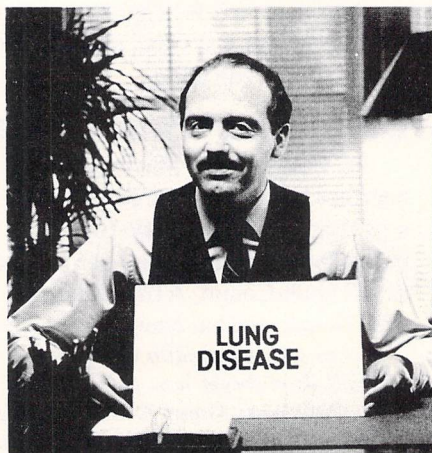
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Some fast talk on lung disease.



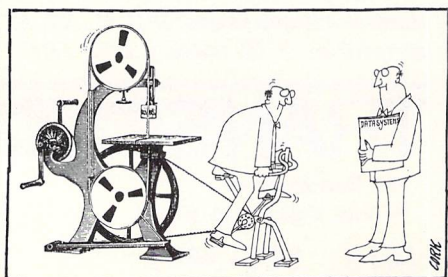
Your lungs are an incredible piece of machinery. But your lungs are also incredibly delicate. Chronic bronchitis. Emphysema. Lung cancer. Asthma. Tuberculosis. All these diseases prey upon the lungs. Even the air you breathe at home or work can be the cause of lung damage. But the American Lung Association is battling *all* these lung diseases. For your lungs' sake, join the fight.

—John Moschitta, the fast talker.

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Service.”

The electronic clipping folder capability is also available in OTC NewsAlert, a database that describes various activities that could affect stock prices of small companies that trade over-the-counter. OTC NewsAlert is available as a searchable database (GO OTCNEWS) or through the Executive News Service (GO ENS). This searchable database of both recent and historical news articles tracks many small and even obscure companies. Until now, obtaining solid information on these organizations often proved to be quite difficult.

The database, which is the only consolidated source of electronic information on over-the-counter companies, is divided into two sections: Recent OTC News and Recent/Historical OTC News. The former contains current news articles that may be retrieved by

searching the company name or ticker symbol. They are intended to provide an overview of the NASD market as well as serve as a beginning to additional research. This is an excellent place, for instance, to find companies that have not yet been assigned a ticker symbol.

The latter category, Recent/Historical OTC News, may contain up to a year's worth of articles on a particular company. News announcements could include summary earnings reports, large sales contracts and new products, plus acquisitions and takeover bids and significant stock transactions by corporate insiders.

Since there are thousands of companies that trade over-the-counter, not all will be included in OTC NewsAlert. But when a company files certain documents with the Securities and Ex-

change Commission, issues new securities or a new company appears in the marketplace, it will be covered by the service. Other helpful data on file in OTC NewsAlert includes internal decision-making information, new product introductions or noteworthy sales contracts. Many of these events can significantly affect the price movements of a company's securities.

The major benefit of the service, according to OTC NewsAlert's Jim Buckner, is the readily available information on the 20,000 to 40,000 companies whose stocks are available over-the-counter but are not listed with the NASD automatic quotation service.

“Until now, you had to personally find the dealer of the stock in order to buy or sell. What we are offering to the investing public is the capability to compete with the insiders by giving them the same information on these hard-to-find companies,” he explains.

To access the Executive News Service, type GO ENS at any prompt on the CompuServe Information Service.

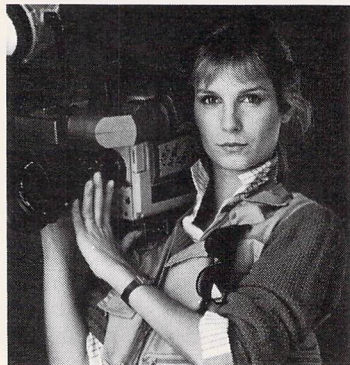
— Cathryn Conroy

For More Business Information

To obtain more information about capabilities offered to CompuServe's business information customers, contact the CompuServe branch sales office nearest you:

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Los Angeles, Calif. 213/216-5867	Atlanta, Ga. 404/231-1440	Parsippany, N.J. 201/898-1944	Toledo, Ohio 419/243-2600
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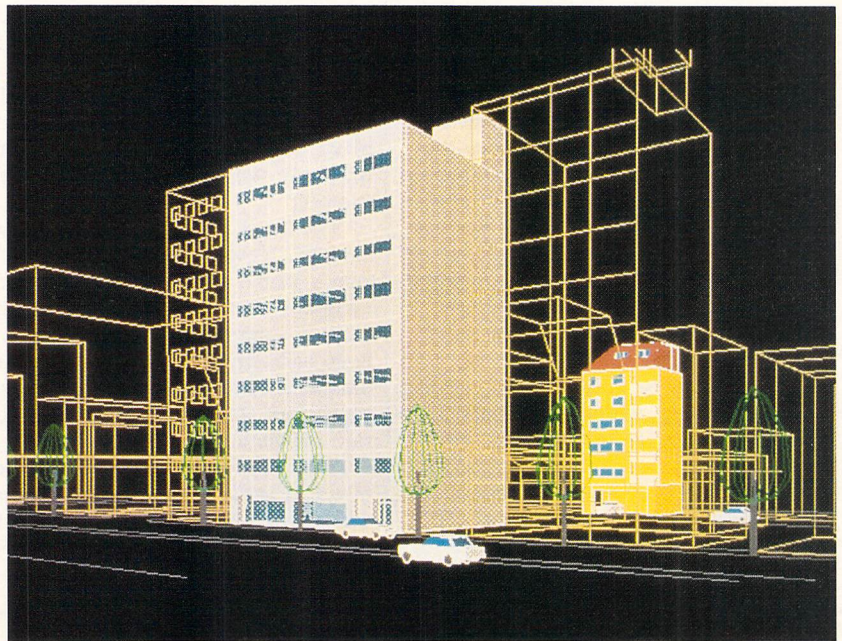
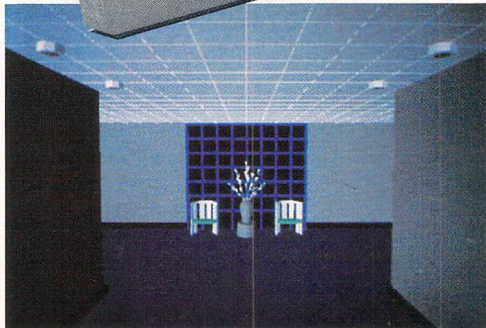
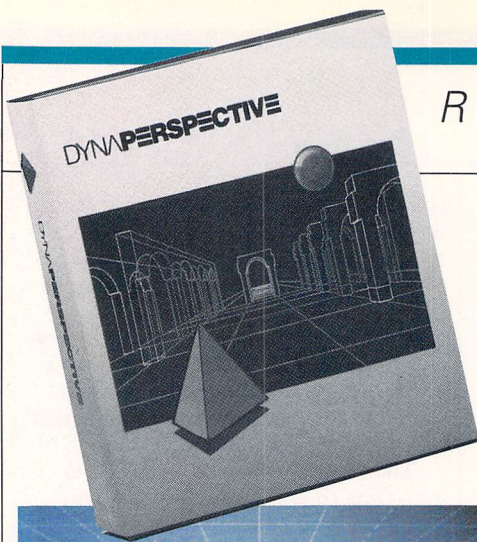
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Create views of hidden surfaces: *Dynaperspective 3D package features pull-down menus*

Dynaperspective

Handles 3D Design, Presentation

Dynaware Div. of Sun Grade
1309-114th S.E., #303
Bellevue, WA 98004
206/451-0200

Computers: IBM PC, PC-XT, PC-AT and compatibles, including 80386-based computers.

Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.

Media: Requires two double-sided diskette drives or a diskette drive and a hard disk (hard disk recommended).

Copy Protection: Purchasers must register software to receive unlocking code that enables software to run; unlocked software is copyable.

Required Peripherals: EGA-compatible video card and monitor (supports 256K IBM EGA equivalents, Number Nine Revolution 2048x4 and Control Systems Artist 1, 1+ and 2); drawing device (supports Calcomp 2500-series digitizers, Summagraphics BitPad and MM-series digitizers and Logitech, Micro-soft and Mouse Systems mice).

Other Requirements: Minimum 512K RAM (640K RAM recommended). **Optional Items:** Printer (supports Epson IP and FX series, IBM Proprinter, Sharp JX-720 and selected Okidata Microline and NEC models); plotter (supports Houston

Instruments HiPlot DMPL series, Hewlett-Packard 7400 and 7500 series and IO Line LP3700).

Systems used for test: (1) 640K Compaq Deskpro with two diskette drives, 20MB IOMEGA Bernoulli Box, 8087-2 math coprocessor, NEC MultiSync monitor and Video-7 VEGA Deluxe video adapter. (2) 1024K Proteus 286GT with two diskette drives, 20MB hard disk, 10-MHz 80287 coprocessor, Amdek Color 722 monitor and STB Systems EGA Plus video adapter. Epson FX-85 printer, Torrington Manager Mouse and Hewlett-Packard 7475A Graphics Plotter used with both computers.

List Price: \$1,850

Reviewed by Ernest E. Mau

Conventional computer-aided drafting systems are great for floor plans, blueprints and other two-dimensional tasks on flat surfaces. While some CAD programs can simulate objects in three-dimensional space, they typically don't do a good job of it. So a new breed of software is emerging for solid-surface modeling.

As a 3D modeling package, Dynaperspective (version 1.0) lets the user design, manipulate and display renderings of physical objects having heights, widths and depths. It works in a real-world environment scaled at from 62.5 to 8,000 feet or 25 to 5,000 meters on a side and with drawing accuracies from

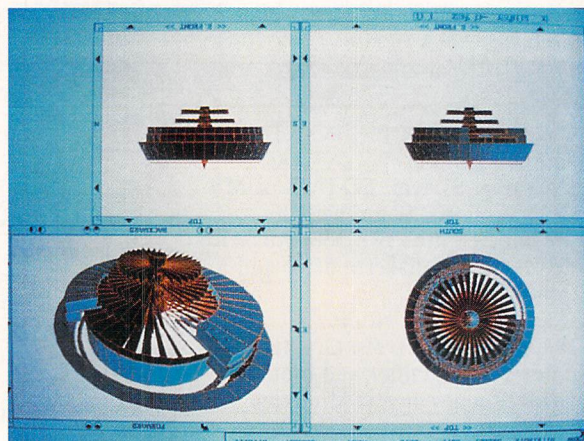
1/32 inch to 4 inches or from 1 mm to 200 mm depending on the scale.

Instead of flat drawing primitives found in CAD programs, Dynaperspective offers shapes such as walls, prisms, posts, cylinders, curved surfaces, stairs and roofs. Walls have heights, widths and thicknesses. Cylinders have heights, diameters and three to 36 sides. Roofs have thicknesses, with slopes determined from ratios of "rises over runs."

Dynaperspective also offers lines, polylines and circles, often used with commands that build solids or surfaces by revolving or extruding elements in space. These can make pyramids, cones, bells and numerous other shapes and objects. Furthermore, objects can be rotated, moved, copied and so on. It is even possible to revolve complete shapes around external axes to create shape arrays.

Unlike a CAD screen, Dynaperspective displays four windows simultaneously for top, front, side and perspective views. Changes made in one are reflected immediately in all four. The user can fill the screen with any view, but actual drawing is done in one or more of the three planar windows. There can be much jumping around, especially since drawing and editing commands often involve selecting items or setting points in more than one plane, but screen changes are fast and minimize time wasted in switching views.

Dynaperspective's real advantage is



the speed at which it can change viewpoints. CAD packages with 3D usually must do time-consuming hidden line removals for each new viewing distance or angle. Making a view can take minutes or hours, depending on drawing complexity and computer speed.

Dynaperspective displays new views almost as fast as the video card will draw them. The reason is that it "compiles" a drawing once and saves a "database" with all information needed to zoom, swing, tilt and so on without more lengthy computations. A drawing need not be recompiled unless it is changed. While compilation takes considerable time for complicated drawings, switching views is surprisingly fast even on slow computers.

Quick responses make it easy to conceptualize or visualize furniture, houses, office buildings, industrial parks and even areas of cities. One moment, the user flies above rooftops. Moments later, he or she hovers outside a window or peers up from the ground. Objects can be semi-transparent or solid, so the user can see through glass windows from either side. Yes, the program even lets a user prowl inside a building or object to examine internal structures, look down halls and so on.

Dynaperspective also lets the user adjust lighting by placing a source and indicating a direction for light to shine. That differentiates surfaces with suitable shading alterations, but the program doesn't know that objects cast shadows. One can see a darkened wall blocked from the sun but no shadow cast on the ground or nearby objects.

Another speed benefit facilitates automated "walk-through" tours, jumping from view to view in an almost animated manner or freezing between views like a slide show. The program lets the user designate up to 10 views as "pages," with the program automatically filling in up to 10 intermediate "frames." Care and practice are necessary, however, and I've seen program-generated frames go in strange directions before reaching preassigned pages.

Dynaperspective is not a CAD package and lacks such functions as auto-dimensioning and line trimming. But it can output DXF files for CAD programs. Thus, Dynaperspective can develop a visually appealing concept or design, and drawings or slices can be sent as wireframe or hidden line drawings to CAD systems for detailing as plans and blueprints.

Dynaware claims the program is easy to use, but it is tricky to handle. Viewing finished drawings is easy, but creating, scaling and manipulating new drawings is difficult. It is extremely difficult if the user lacks an innate sense for spatial relationships. Things aren't helped by having to cope with 12 cursor types, each with its own meaning. Instead of fighting with a pointing device and imprecise cursor, I usually enter numerical coordinates in on-screen tables provided for drawing and editing functions.

The manual is poorly organized, sometimes misleading, often vague, usually incomplete and occasionally wrong. Illustrations sometimes don't match screens, and the index is worthless for finding information. Even the

tutorial was trouble, causing many false starts before I worked halfway through it.

Printer support is marginal for a monochrome dot-matrix printer. It needs better density and resolution control, and it often prints unwanted dark bands. Plotter support is worse. It plots only wire frames or object edges, eliminating all shading. It doesn't like the standard HP 17255D plotter cable and balks if operated faster than 1200 baud. And contrary to the manual, pen stalls of my six-pen plotter don't correspond to the program's color menu layout.

Still, Dynaperspective pioneers new microcomputer applications. Like many new programs, its real value is in its tremendous but as yet unrealized potential. I suspect version 1.0 was rushed to market prematurely and feel the program needs more development to refine its operation, documentation and hardware support. Then it could be a truly practical tool worthy of its hefty price tag.

Ernest E. Mau, a full-time free-lance writer and Online Today reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.

Trademarks: IOMEGA and Bernoulli Box (IOMEGA Corp.); Compaq and Deskpro (Compaq Computer Corp.); Dynaware and Dynaperspective (Dynaware Div. of Sun Grade Inc. and Dynaware Corp. of Japan); EGA Plus (STB Systems Inc.); Epson and Epson FX (Epson America Inc.); IBM, PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); Manager Mouse (The Torrington Co.); MS-DOS (Microsoft Inc.); MultiSync (NEC Home Electronics Inc.); Proteus (Wintech Data Products Corp.); VEGA Deluxe (Video-7 Inc.).

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MathCAD:

An Engineer's Scratch Pad

MathSoft
One Kendall Square
Cambridge, MA 02139
617/577-1017 or 800/628-4223

Computers: IBM PC, PC-XT, PC-AT and compatibles.

Operating System: PC-DOS or MS-DOS version 2.0 and higher.

Media: Requires two 360K diskette drives or one diskette drive and a fixed disk.

Copy Protection: None.

Required Peripherals: Graphics or color video adapter and monitor.

Other Requirements: Minimum 512K RAM.

Optional Items: EGA video adapter; 8087 or 80287 math coprocessor.

System used for test: 640K Compaq Deskpro 286 with 1.2MB diskette, one 20MB hard disk, Hercules Graphics Card and monochrome monitor.

List Price: \$249

Reviewed by Harry Green

The Gallup Polls may not confirm this, but I have a theory that when it comes to what frightens people, something ranks above nuclear power, AIDS or depletion of the ozone layer. No, it is not a disease or some new method of mass destruction, but it is a mysterious force endowed with mystical powers and arcane symbolism. Starting at an early age, more people are intimidated by mathematics than all of the school bullies combined. Now comes MathCAD, promising to work problems on your personal computer at a speed that would dazzle your differential equations professor.

Mathematical notation is confusing until you begin to understand the beauty of a shorthand notation that transcends all spoken languages. Sure, the Greek letters are just Greek until you grasp the symbolism, and then one symbol states what would take a paragraph to explain in English. Most number-crunching programs abandon common mathematical notation because the symbols aren't on the keyboard. So an equation becomes a confusing array of parentheses, asterisks and other symbols as substitutes for standard mathematical notation.

MathCAD differs from other pro-

grams. Formulas are displayed in the format you see in textbooks. MathCAD handles superscripts and subscripts, and it displays most standard Greek characters. Where the program needs brackets an inch high, the program generates them. Symbols such as "pi" and "e" are assigned the values they customarily bear, although they can be redefined.

Symbols are generated by pressing key combinations. For example, the symbol for pi is [ALT-P], and upper-case Sigma, denoting the sum of a series, is generated when "\$" is entered. Parentheses are converted to brackets where appropriate.

MathCAD inserts "placeholders" as small, solid squares where the program needs defining values. Placeholders indicate where values must be entered to make a formula work. For example, in summation, you must enter a range by inserting values at the top and bottom of the Sigma symbol. If you attempt to execute a formula without the required range values, the program draws an arrow from the offending location to a box that explains the error.

It takes time to get used to MathCAD's keyboard operations, many of which differ from other programs. This particularly applies to editing formulas. MathCAD disallows blanks in

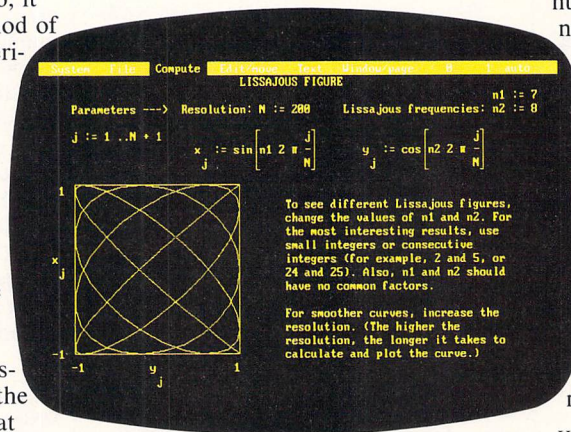
MathCAD's ability to handle differential and integral calculus distinguishes it from many competitors. I entered a substantial sampling of problems from a book with the unlikely title "How to Enjoy Calculus," and found that MathCAD gave consistently predictable answers. MathCAD's advantage isn't so much in its ability to solve a single problem. If you know how to use mathematics, you can solve a problem in the same time it takes to set it up on MathCAD. Where the program shines is in repetitive solutions. By establishing a table of input variables, you can assign different values to the variables and recalculate and graph a solution in an instant.

MathCAD handles imaginary numbers with ease, but it stops short of solving problems that lack numeric solutions. Some of the most cursed problems in mathematics involve simplifying equations and restating them as other equations. Neither MathCAD nor any other program I've seen can handle such indefiniteness.

Don't expect MathCAD to help much in developing a formula to solve problems either. The program does not substitute for an understanding of mathematics any more than a pocket calculator knows enough to do income tax. Instead, the program relieves you of the mind-numbing and error-prone number-crunching required to derive a numeric solution after a formula has been stated. It does this with a great deal of grace and speed.

MathCAD obviously isn't for everyone. It doesn't replace a spreadsheet, so it won't find wide application in business. It doesn't create formulas, so it won't make an instant math whiz from a duffer. Yet it is an excellent tool for engineers, architects, students and scientists who manipulate formulas and need an easy way to set them up in familiar, conventional mathematical styles.

Harry Green is a free-lance writer from Portland, Ore. He is author of Automating Your Office and Local Area Networks. His latest book, Handbook of Telecommunications, is published by Dow Jones-Irwin. His CompuServe User ID number is 70007,431.



Mathematical notation simplified:
MathCAD computes Lissajous figures

the middle of a formula. The editing cursor is toggled by the insert key and lets you place entries immediately before or after a location by typing on top of an existing entry. The results sometimes are unexpected, and backspacing can wipe a complete formula off the screen. But a few hours of practice bring the program under control.

Trademarks: Compaq and Deskpro 286 (Compaq Computer Corp.); Hercules and Hercules Graphics Card (Hercules Computer Technology); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MathCAD (MathSoft Inc.); MS-DOS (Microsoft Corp.).

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TM/1 Table

Management/Spreadsheet Software

Sinper Corp.
8901 Tonnelle Ave.
North Bergen, NJ 07047
201/662-7999

Computers: IBM PC, PC-XT, PC-AT, Compaq and compatibles; special version available for Wang PC.

Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.

Media: Requires one diskette drive or a diskette drive and a hard disk.

Copy Protection: None.

Required Peripherals: Graphics capability requires IBM Color/Graphics Adapter (CGA) or Hercules Graphics Card.

Other Requirements: Minimum 256K RAM.

Optional Items: Hard disk is recommended; supports 8087 math coprocessor.

System used for test: 640K IBM PC-XT with Hercules Graphics Card Plus, two diskette drives, Maynard 20MB hard disk and Okidata Microline 84 printer; running PC-DOS 2.1.

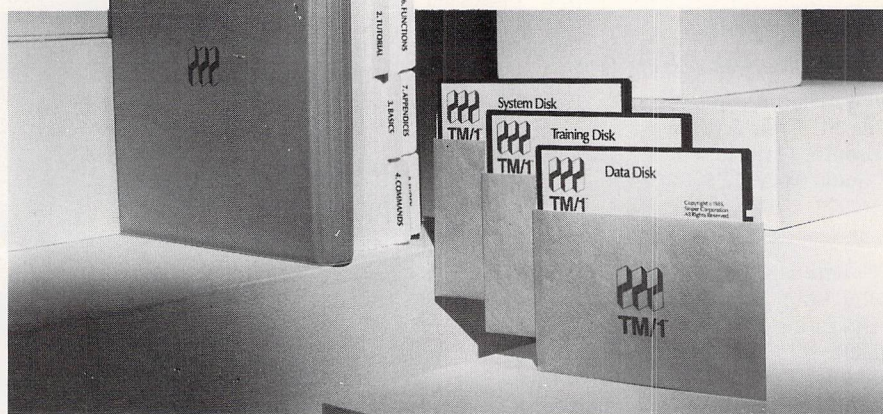
List Price: \$795

Reviewed by William J. Lynott

With all the emphasis on cloning and imitation in software these days, it is refreshing to come across a truly innovative product. TM/1 (version 2.0) is a genuine original that offers an efficient way to analyze business statistics.

Not long after VisiCalc was introduced in 1980, serious users began clamoring for features that would make electronic spreadsheets more flexible. It is difficult to believe now that the original spreadsheets wouldn't even support different column widths in the same template. Yet, after super spreadsheets such as Lotus 1-2-3 arrived on the scene, power users still bumped up against program limitations, one of the most serious being the way spreadsheets store data.

In a spreadsheet, all data are entered and subsequently stored in individual templates or files. The data and the spreadsheet are a unit. If you want to use the same data in another format, you must create another template and enter the data again. While some sophisticated spreadsheet programs now let you transfer data among files, this is often an unwieldy process that involves complex operations and opportunities for errors.



Elegant solution: TM/1 Table helps analyze business statistics

TM/1 offers an elegant solution. Using a generic table manager approach, TM/1 stores raw data in a separate database where it need be entered only once. Conventional spreadsheets then can be created by drawing on the stored data.

Say you have a chain of five retail stores (or five departments in a corporation) for which you want to store and analyze sales and expenses. Using TM/1, you first create a list of "dimensions" (TM/1's name for titles of basic elements). Payroll, rent, insurance and utilities all are dimensions. Other dimensions might be months and years, store locations or department names.

When your list of dimensions is complete, you create a table using dimensions you wish to analyze. Then fill in the data. The table then can be manipulated through simple keystrokes to build a spreadsheet suited to your needs. You might designate months as column titles and expense items as row titles. This format could be used to analyze each location or department with a separate spreadsheet. Or you could designate locations as the column titles, allowing you to compare expenses for each location or department over a designated period of time.

Data in your tables may be sliced up this way in an almost unlimited fashion, giving you an analytical tool that is superior to and quicker to use than a conventional spreadsheet. Any changes that you make in your list of dimensions or in the data tables will be incorporated automatically into the worksheets you construct.

TM/1 is completely menu driven and is surprisingly easy to grasp, considering how far it departs from conventional methods for storing and analyzing business data. The main menu offers but three choices: Dimensions,

Tables and Worksheets. The program makes skillful use of special function keys in all modes. The function of each key varies depending on the current mode, but the last display line lists the correct function for each key at all times.

One aspect of TM/1 that most users of large, complex spreadsheets will appreciate is the English names given to all dimensions. Cell addresses, which can be tough to remember or locate when conventional spreadsheets grow large, are of no consequence in TM/1: Payroll always is called payroll, and rent is rent. Any time you want to incorporate a dimension, just name it. TM/1 will handle it properly.

Although the user manual is better than many, it could be sharpened up in several spots. TM/1 will import ASCII, dBase II, dBase III and Lotus 1-2-3 files, but documentation of the process is sketchy. For example, the suffixes on files created with Lotus 1-2-3, release 2, must be changed to WKS before TM/1 recognizes them. The manual should say so instead of forcing you to noodle that out for yourself. The disk tutorial, however, is excellent.

TM/1 is a powerful and practical tool for analyzing business data, and it goes a step beyond the conventional spreadsheet for serious analytical work. Even in today's market, though, I find its price of nearly \$800 a bit steep.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.

Trademarks: dBase II and dBase III (Ashton-Tate); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); Lotus and Lotus 1-2-3 (Lotus Development Corp.); MS-DOS (Microsoft Corp.); Okidata Microline (Okidata Div. of Oki America Inc.); TM/1 (Sinper Corp.).

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NewViews

Accounting with a New Twist

Q.W. Page Associates
One St. Clair Ave. West
Toronto, Ontario
Canada M4V 2Z5
416/923-4567

Computers: IBM PC, PC-XT, PC-AT and 100 percent compatibles.

Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.

Media: Requires one diskette drive or a diskette drive and a hard disk.

Copy Protection: None.

Required Peripherals: None.

Other Requirements: 256K of RAM recommended.

Optional Items: None.

System used for test: 640K IBM PC with one 360K double-sided, double-density diskette drive and one 20MB hard disk; running PC-DOS 2.1.

List Price: \$695.95

Reviewed by James Moran

Double-entry accounting is the standard bookkeeping method for business. Q.W. Page continues that method but claims to have improved on it by integrating the best features of word processors and spreadsheets into NewViews. Further, they've moved the look of accounting documents into their software. By using screen images of accounting documents, they apparently believe users will find this product more natural to work with than other computerized systems.

NewViews accesses all commands through pop-up menus, and commands are consistent through all program modules. For example, the same command is used to add a transaction, account or report to any accounting subsystem. Advanced users can elect to enter commands directly without going through the menu interface.

Context-sensitive help is always just a function key away. The developers feel the help is so extensive that a training manual or keyboard template isn't needed. In fact, the manual included with the system provides no more than a system overview. There are no detailed instructions for operation.

Data to be entered into NewViews are keyed directly into a document, and all documents have the same general form. At the top, a header defines the document and contains dates, opening and closing balances and similar infor-

mation. Each document contains columns, with descriptors, into which actual data are entered. Each horizontal line can be operated on much like the lines in a word processor, so lines can be added, deleted, searched and even used in block mode operations.

The reporting structure is generalized and lets users add various ledgers and books. Among NewViews' claims to fame is that you never need buy a new module, no matter what your accounting needs. The system will handle receivables, payables, payroll, sales, order entry, inventory and virtually any other reporting need. A bonus is that when information is entered into one ledger, any associated financial reports are updated automatically.

One truly useful feature is the ability to "explode" a document. While browsing a document, you can expand any detail item to a full document. For instance, by positioning the cursor on the balance sheet account for cash on hand, you can expand the single entry into a detailed subsidiary ledger that shows payments from invoices. Position the cursor again, and you can see a distribution ledger that shows how an invoice payment was applied to a customer account. You even can move directly to the document into which an item was entered.

Special reporting requirements that cannot be handled by one standard view can be constructed by special procedures. NewViews lets a user build

customized reports with the NewViews Procedure Language. Although using NPL is not a task for the faint-hearted, it allows access to all product commands and documents.

At first, I wasn't too comfortable with the way NewViews operated. The ability to move back and forth between documents, expanding or condensing from reports, really didn't feel right no matter what the developer claimed. However, after using the software for a while, I began to recognize the benefits in being able to skip through the system at will. Also, it no longer was necessary to have accounting closes just so ending adjustments could be made. All amounts are perpetual and can be viewed for any period or selected date. Closing entries are never needed.

NewViews can handle the accounting functions of any business up to \$10 billion. It is practical enough to be used for a wide variety of accounting purposes, and it has facilities to import and export data from other systems. Although its format may seem unusual to traditionalists, it may prove to be a true melding of computer technology with accounting theory.

James Moran is a free-lance writer and frequent contributor to Online Today. His CompuServe User ID number is 70007,2253.

Trademarks: IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); NewViews (Q.W. Page Associates Inc.); MS-DOS (Microsoft Corp.).

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Melding computer technology and accounting theory: *New Views*

Amiga Logistik

Integrated Software Has Power

Progressive Peripherals and Software
464 Kalamath St.
Denver, CO 80204
303/825-4144

Computers: Commodore Amiga; versions also available for IBM PC and compatibles, Hewlett-Packard Model 150 and Atari ST.

Media: Furnished on 3.5-inch diskette.

Copy Protection: Program requires "dongle" (joystick-port plug-in device) to run.

Required Peripherals: Color monitor.

Optional Items: Printer.

System used for test: 512K Commodore Amiga with 1080 monitor, external disk drive and Epson RX-80+ printer.

Retail Price: \$149.98

Reviewed by Cheryl Peterson

Logistik is an integrated software package that combines spreadsheet, database, graphics and time-management. In capabilities, it rivals or excels dBase III, SuperCalc, Lotus 1-2-3 and Excel. While it offers many of the same functions as those well-known programs, it is hampered by not taking full advantage of the Amiga's Intuition interface.

Run through the Command Line Interface, Logistik uses windows to present information but doesn't support any menus. Everything is accomplished through keyboard commands, with function keys assigned to the most commonly performed tasks.

Logistik also does not support a mouse, so you must use the GOTO command or arrow keys to move around. For those who count on the convenience of "point and click," this comes as a rude shock. What really hurts, though, is that the cursor is still on-screen and active. You can move it around and point to items, but nothing happens when you hit the buttons. The only thing you can do with the mouse is pull down the whole window so you can see what is behind it or move windows from front to back. This is necessary because graphs are created in their own windows.

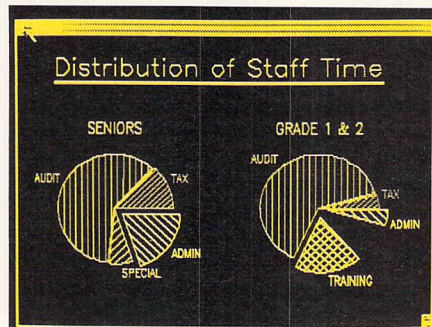
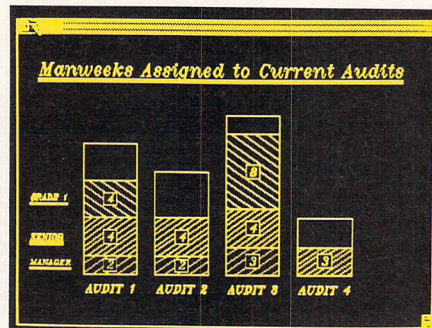
Once you get past being dependent on the keyboard, the program is impressive. As with SuperCalc, many commands are accessed by using the "/" character. A protection feature can be

used to lock areas of data that you do not want modified.

Logistik handles database or spreadsheet arrangements. The list of functions it supports is almost amazing and includes time, calendar, mathematical, logical, statistical, database, financial and special functions. All standard math operations are supported.

With auto commands and macros, you can program some complicated functions. This is almost a necessity considering the complexity of creating graphs. Macros may be incorporated into automated sequences.

Logistik creates numerous graphs and can write labels on them in nine



Integrated software: Amiga Logistik

different fonts. Chart types include individual pie, common pie, clustered bar, stacked bar, line, step, spread, tick, scattergram and Gantt. A separate category called "wordslides" can generate text illustrations or explanations. The graphing functions support 10 text fonts, 10 line types, 10 hatching types and 10 special characters for markers. Graph pages can even include footnotes and annotations.

The manual is interesting, informative and involved. With a program this size, it needs to be. But the supplier should have done a more comprehensive rework of it for the Amiga. As it stands, most file and disk-related information is presented in MS-DOS terms.

Some commands that may be accessed using special keys on the Amiga keyboard aren't documented in the manual. However, the manual has good glossary and appendix sections with error message explanations. A command summary card is well organized and helpful.

There are good samples on a second disk provided with the package. These include a sample database, spreadsheet, time sheet and graphs.

The disks are not copy protected, but a "dongle" that plugs into the second joystick port is required to run the programs. Three versions of the program are provided. The smallest requires 512K of memory and makes extensive use of overlays. Even so, generating even a couple of graphs can exhaust memory and will crash the operating system when using version 1.1 of Kickstart and Workbench. Using Amiga multitasking is nearly impossible with only 512K available.

The other two program versions use expanded memory. Because they do not need to access the disk to get overlays, they run faster. One offers much higher screen resolution as well. I have only 512K available, so I wasn't able to test these versions and have to take the supplier's word that they work.

Logistik is a complicated but versatile program. For the power user, this program may be the only way to go since companies such as Ashton-Tate, Lotus and Computer Associates ignore the Amiga. For less than \$150, Logistik offers features found in the most expensive packages on other computers.

Those addicted to the Amiga user interface and not needing as much power may want to look elsewhere. If you can live with a return to "stone knives and bearskins," though, this is a great program.

Editor's note: At the time of this review, the product was in transition from "Logistix" to "Logistik" owing to trademark conflicts. It is possible that the software may be found under either name on dealer shelves.

Cheryl Peterson, a free-lance writer from Miami Beach, writes reviews for several computer magazines. Her CompuServe User ID number is 72366.2645.

Trademarks: Commodore Amiga (Commodore Business Machines Inc.); dBase III (Ashton-Tate); Epson RX-80+ (Epson America Inc.); Excel and MS-DOS (Microsoft Corp.); Logistik (Progressive Peripherals and Software); Lotus and Lotus 1-2-3 (Lotus Development Corp.); SuperCalc (Computer Associates Inc.).

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DSBackup+ and DSRecover: Disk-Management Utilities

Design Software
1275 W. Roosevelt Rd.
West Chicago, IL 60185
312/231-4540

Computers: IBM PC, PC-XT, PC-AT and compatible computers; also available for Unix/Xenix computers.

Operating System: PC-DOS or MS-DOS 2.0 or later; Unix/Xenix version also available.

Media: Each program supplied on a single diskette.

Copy Protection: None.

Required Peripherals: None.

Other Requirements: Hard disk (these are hard-disk management utilities).

Optional Items: None.

System Used for Test: 704K Heathkit PC-150 computer with high-resolution color monitor, two double-sided diskette drives, two 20MB hard disks and V-20 processor; running MS-DOS 2.13.

List Prices: \$79.95 for DSBackup; \$49.95 for DSRecover.

Reviewed by Hardin Brothers

As hard disks grow larger, managing their contents and assuring data integrity become more difficult. Design Software's utility programs can help with that task, performing some functions faster than DOS equivalents and other functions unique to these utilities.

DSBackup+ version 1.05 is an enhanced edition of the original DSBackup utility. New features can create a report of files that have been backed up, select files for backup by date and compress data being backed up. DSBackup+ also allows single-file and single-subdirectory restore operations, which is helpful when using backup disks for archival purposes.

Like the original, DSBackup+ generally is easy to use. It can be run from a menu or directly with command-line options. The latter would be most valuable for batch file commands that save data regularly and automatically. The program runs quickly; I backed up 31 short text files totalling 58,614 bytes onto a formatted disk in 17 seconds using DSBackup+ default options.

Unfortunately, the data compression routine is anything but efficient. In several trials, it condensed files from 0.5 to 13.0 percent. Text files should be the easiest to condense, especially ones

filled with spaces, but DSBackup+ seemed to compress such files the least. For example, textfiles that required 59,929 bytes when backed up without the squeeze option took 59,628 bytes with data squeezing enabled.

DSBackup+ seems to run about three times faster than the DOS Backup utility and is more flexible. In menu mode, it is much easier to use. An even faster backup utility, Speedbak, is included on the distribution diskette, but it backs up only to diskettes. It is faster than DSBackup+ at actually moving files from a hard disk to floppies, but it uses its own special format on the floppies and so must stop and format them during the backup process.

Design Software's other hard-disk utility, DSRecover version 1.01, can recover files that have been erased accidentally and complete hard disks that have been reformatted accidentally.

To protect files from accidental erasure, a memory-resident program called Sentry intercepts any operating system call that erases a file. It then renames the file with a special code, marks it as a hidden file, and records the original filename in another hidden file. According to the directory listing, the file is gone, but no disk space has been reclaimed.

A second program in the DSRecover utility lets you view a list of "deleted" files on each subdirectory. You can choose to recover individual files, groups of files or all erased files in a given subdirectory. You also can purge files that already have been "erased" from the DOS level. Once a file is purged, it is gone for good, and its disk space is made available for other files.

DSRecover also can save statistics about an entire hard disk to another disk. If that hard disk is reformatted accidentally, DSRecover can use the information to reclaim all files on the disk. This works because reformatting does not really change any information on the disk except the file allocation table and directory. All other sectors

are left untouched by most versions of the DOS format program.

One option in DSRecover is supposed to create a "snapshot" of the computer's current memory. If a power failure occurs, that snapshot could restore memory to its former condition just as if the computer had never been turned off. However, that function had not been implemented in the review copy of DSRecover, so I wasn't able to test it.

Documentation for both programs is supplied in 5-inch square booklets. Some sections of each are complete, but other sections just imply that certain functions exist without explaining how to use them. It took me more than an hour to figure out how to restore individual files from a backup disk with DSBackup+ because the relevant docu-

mentation didn't explain how to do so.

Despite its flaws, I like DSBackup+ and DSRecover. It is quick, easy to use and does an important job well. I'm less impressed with DSRecover because it slows down

all DOS delete operations and makes permanently removing a file from disk a two-step process. Other utilities can perform both of its major functions, restoring erased files and reformatted hard disks, with less fuss and bother.

Hardin Brothers is an associate editor of 80 Micro and a frequent contributor to several other magazines. He is also forum administrator of CompuServe's Writers' and Editors' Special Interest Group (GO WESIG).

Trademarks: DSBackup, DSBackup+ and DSRecover (Design Software Inc.); Heathkit (Heath Co.); IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Inc.).

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DSRecover Version 1.01, (c)Copyright 1986 by Design Software											
ACCESS	COM	4882	18-29-86	2:31p	SILK	EXE	266496	11-21-86	11:38a		
SILK	SET	9394	12-16-86	3:11p	SILK	CNF	43592	11-21-86	11:15a		
TUTOR	MW0	4380	11-24-86	12:42p	TRANS	MW0	13890	11-11-86	12:58p		
SILK	HLP	221817	11-28-86	4:05p	INSTALL	EXE	14784	11-17-86	2:09p		
UTIL	SET	2433	9-08-86	9:26a	DEVICE	LBR	27788	11-20-86	3:05p		
1232SILK	EXE	68298	11-13-86	4:36p	DIF2SILK	EXE	27892	11-13-86	4:38p		
SILK2123	EXE	54118	11-13-86	4:37p	SILK2DIF	EXE	38247	11-13-86	4:39p		
SAMPLE1	MW1	1484	11-17-86	6:37a	GET_HELP	MW0	4474	10-06-86	5:11p		
ALLOCATE	MW0	6221	10-12-86	1:42p	TIMEMODL	MW0	8928	10-11-86	2:15p		
CIRCULAR	MW0	3928	11-24-86	12:46p	INTRODUC	MW0	7558	11-24-86	11:12a		
SAMPLE2	MW1	1586	11-17-86	6:39a	SAMPLE3	MW1	2278	11-21-86	4:20p		
SAMPLE4	MW1	2422	11-17-86	6:40a	SAMPLE5A	MW1	751	11-17-86	6:42a		
SAMPLE5B	MW1	867	11-17-86	6:45a	SAMPLE5C	MW1	1119	11-17-86	6:47a		
SAMPLE5D	MW1	759	11-17-86	6:49a	SAMPLE5E	MW1	1649	11-17-86	6:51a		
SAMPLE6	MW1	2884	11-17-86	6:52a	SAMPLE7	MW1	2513	11-17-86	6:52a		
GET_HELP	TUT	158	10-08-86	9:26a	ALLOCATE	TUT	276	10-12-86	1:46p		
TIMEMODL	TUT	1222	10-11-86	2:26p	INTRODUC	TUT	258	11-24-86	11:13a		
CIRCULAR	TUT	144	11-24-86	12:39p	KEYSTROK	LOG	512	12-16-86	3:11p		

View Recover Purge Save Unformat Options Help Exit

Directory File

Managing memory: DSBackup+, DSRecover

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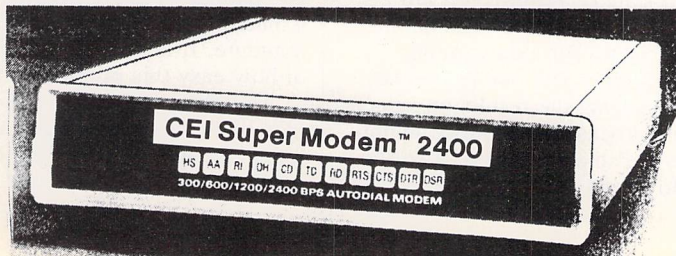
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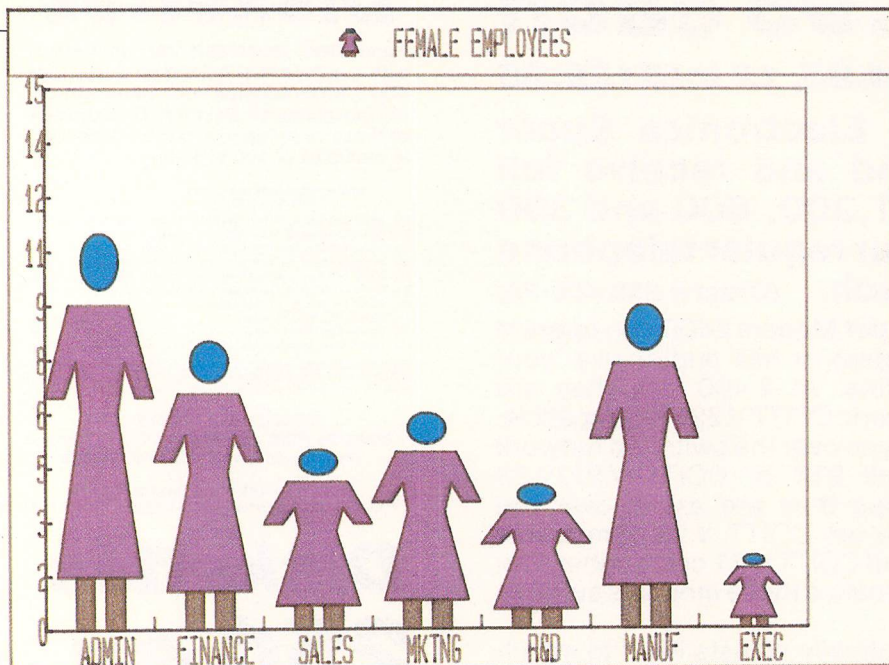
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It delivers: Samna Decision Graphics combines fun and power

Samna Decision Graphics Program

A Presentation Graphics Package

Samna Corp.
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404/321-5006 or 800/831-9679

Computers: IBM PC, PC-XT, PC-AT, 3270 PC and compatibles.

Operating Systems: PC-DOS or MS-DOS version 2.1 or higher.

Media: Distributed on three diskettes; requires two diskette drives or one diskette drive and a hard disk.

Copy Protection: None.

Required Peripherals: Color or monochrome monitor; video adapter compatible with IBM CGA, IBM EGA or Hercules monochrome graphics standards.

Other Requirements: Minimum 256K of RAM; minimum 384K of RAM if using EGA video card.

Optional Items: Printer or plotter (supports more than 40 printers and 20 plotters.)

System used for test: 640K Victor VPC II with one diskette drive, one 30MB hard disk, CGA-compatible video card, color monitor and Toshiba P351 printer.

List Price: \$450

Reviewed by Frank Jones

Decision Graphics combines a fun toy and a powerful business tool. The

program comes on three diskettes and can be installed easily within minutes.

Before diving into Decision Graphics, I recommend studying the menu roadmap that comes with the package. I failed to pay attention to this diagram at first, so my learning curve was a bit slow. Using the roadmap, you'll quickly recognize the structure and logic in the program's design. With the program's hierarchy of menus and menu options, a knowledge of the roadmap also helps you get around without wasting time.

After the program loads, you'll see a screen divided into three nearly even sections. One displays current menu options, another displays a directory of files, and the third lists macro commands you may have stored.

Creating a graph is simple. When starting from scratch, begin at the Load Menu and select "From Keyboard." Then you'll be assisted as you define necessary values for a new graph. After that, you're just one keystroke away from seeing the results on screen. The whole process takes only a minute or two to create a simple but functional graph. However, the beauty of Decision

Graphics is that you aren't limited to simple graphs.

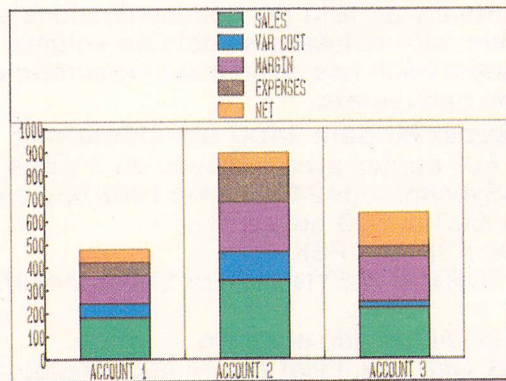
By working through various other menu options, you can easily change your humble beginning into an exploded pie chart, a three-dimensional bar chart or even a pyramid chart using a graphic symbol selected from a symbol library. The variations are endless. You can have a non-exploded pie chart or only one wedge exploded. You can create a point or line chart. You can even make a standard numerical chart without any graphics at all.

After a basic design is complete, Decision Graphics lets you write text in various fonts, change background colors, add patterns or even add a window in which you insert a second graph. There are nine options for fixed window sizes, or you can create your own window of any size. Once you understand the program's roadmap, accessing these capabilities is easy.

After you feel comfortable with the program, you can do away with menus and execute instructions from a command line at the bottom of the screen. All commands are logical abbreviations of actual functions, and each is preceded by an apostrophe. For example, the command 'ERWI erases a window area.

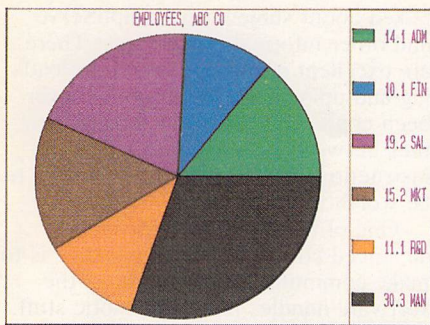
Decision Graphics also lets you

combine multiple commands into an executable macro, which can be saved and filed in the Macro Directory. Up to 230 characters can be combined in a single macro. It is easily possible to combine all commands needed to cre-

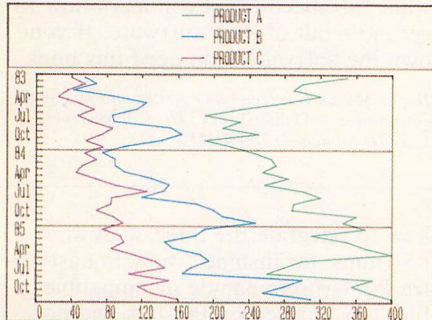


ate a graph into one tidy macro, so the entire process can be automated with one keystroke. The macro facility also can automate slide shows on a PC monitor, where a new graph is displayed every few seconds while a narrator describes the data. Once you have graphs ready for presentation, creating a macro to automate a show takes only a minute. It is just one more example of how easy this program is to use.

The More Options Menu offers incredible versatility. You can select from nine different font options for text, and you can make text bold or



light, wide or condensed, tall or short. With an EGA card, you can choose from 16 colors for background or text. In addition, you can select various grid and line patterns. All of these add spice to traditional presentation graphics but also open a new application for the software. I found Decision Graphics ideal for making professional-looking informational slides, complete with contrasting text sizes and border colors. Of course, an EGA board is essential to create a good text-based presentation. I admit that this isn't a cost-effective use of the program, but it is certainly an added benefit.



Despite my overall endorsement, there are things I didn't like. There is absolutely no online help available. The closest thing is an occasional error message. A help facility would be appreciated, especially when working with advanced features such as the Calculations Menu.

A second complaint concerns documentation. While it is better than that of other Samna products, it could be improved. I noticed several errors in the tutorials, but none were serious. The index is the worst part. It is barely six pages long and offers no more information than a typical table of contents. Without a help facility, a good manual index is critical.

Nevertheless, Decision Graphics is everything it claims to be. I wasn't disappointed by its performance and recommend it as a graphics tool for nearly any business application.

Frank Jones was formerly the managing editor of

Interface Age magazine and editor-in-chief of IBM PC Update magazine. He has written articles for various computer publications, is a regular contributor to Online Today and serves as a marketing and communications consultant.

Trademarks: IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Corp.); Samna and Samna Decision Graphics (Samna Corp.); VPC and VPC II (Victor Technologies Inc.).

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Electronic Edition Software Reviews

The following reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-230 at any CompuServe Information Service prompt.

A-Talk and MacroModem Telecommunications

Manufacturers: Felsina Software and Kent Engineering and Design.

Computer: Commodore Amiga.

PC-Talk4 Telecommunications

Manufacturer: Headlands Communications Corp.

Computers: IBM compatibles (not PCjr.).

TeleMagic Communications

Manufacturer: Remote Control Computer Support Group.

Computers: IBM compatibles.

Ability Integrated Software

Manufacturer: Migent Inc.

Computers: IBM compatibles.

Filebase Flat-File DBMS

Manufacturer: EWDP Software Inc.

Computers: IBM compatibles and selected CP/M computers.

OfficeWriter 5.0 Word Processing

Manufacturer: Office Solutions Inc.

Computers: IBM compatibles.

CompareRite Document Redliner

Manufacturer: JURISoft Inc.

Computers: IBM compatibles.

Periscope 3.0 Debugging Tool

Manufacturer: The Periscope Company Inc.

Computers: IBM compatibles.

The Norton Utilities 4.0 and Advanced Edition

Manufacturer: Peter Norton Computing Inc.

Computers: IBM compatibles.

EZ-Forms Business Forms Generator

Manufacturer: EZX Corp.

Computers: IBM compatibles.

Saber Menu System

Manufacturer: Saber Software.

Computers: IBM compatibles.

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T O D A Y

Mastering Crosstalk XVI

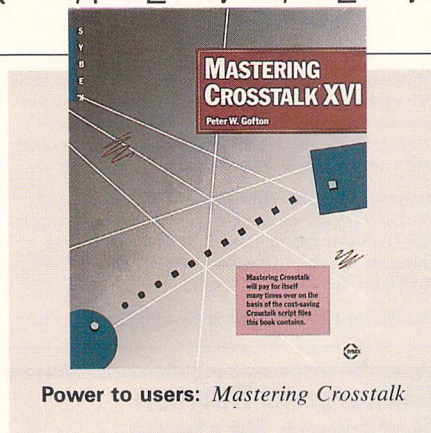
By Peter W. Gofton
Sybex, 1987
187 pages, \$15.95 (softcover)

Reviewed by James Moran

Crosstalk is one of the most popular telecommunications programs available for the IBM personal computer. Much of that popularity is due to the wide selection of features available. *Mastering Crosstalk XVI* is meant to provide clear explanations of how to use those features.

Three versions of Crosstalk are available for personal computers. This book does not contain information on the CP/M version, nor does it cover any of the advanced communications capabilities of Crosstalk Mark 4.

Part I of the book is restricted to instructions on setting up communications hardware and software. Those who need to install and connect hardware will find the information more of an overview than a detailed set of instructions. Installation instructions for Crosstalk XVI are included, but the majority of information is on how to load and run the software. Emphasis is on customizing Crosstalk XVI so that it is compatible with a specific modem and computer.



Part II ("Preparing for Data Transmission") centers on the mechanics of getting your system ready for online use. Specific information about setting data bits, stop bits, parity and baud rate is presented. Since all of this information can change, depending on the system you are communicating with, the discussion about ways to determine and vary communications parameters is particularly useful. For most new users, anything that removes the mystery of connecting to remote systems is welcome knowledge.

Mastering Crosstalk XVI continues with a discussion on what seems to be the most confusing topic in communications: sending and receiving data. This one area has probably been the most

talked about subject on CompuServe and other information services. There are excellent discussions on downloading and uploading files. If you've ever been confused about transferring data files between systems, you'll find the instructions on file-transfer protocols to be worth the price of the book.

One of the purposes of using an advanced communications package is to make communications simple — the software handles all of the exotic stuff. The chapter on command and script files will help readers to use the automated features of Crosstalk XVI. Once they've learned those features, they'll discover many ways to improve their use of information services while keeping costs to a minimum.

Mastering Crosstalk XVI closes with a look at information services such as CompuServe. Gofton discusses previously presented information (such as using script files) and explores some additional techniques that can best be used with these services. For beginners, this book will serve as an introduction to the power in Crosstalk XVI, while advanced users will learn how to get more out of their software. If you own the software, you need this book.

James Moran is a free-lance writer and frequent contributor to Online Today. His CompuServe User ID number is 70007,2253.

The Shareware Book

By Emil Flock, Miriam Flock and Howard Schulman
Osborne/McGraw-Hill, 1987
652 pages, \$14.95 (softcover)

Reviewed by Lindsay Van Gelder

The formula for *The Shareware Book* is such a good idea that it is a wonder nobody did it before now: take PC-Write, PC-File III and PC-Talk III — the IBM-compatible word processor, database manager and telecommunications software that are among the most popular of the try-it-first-and-pay-later-if-you-like-it "shareware" programs — and put together a guide to using them individually and together.

Since no one has written at length about the individual programs (despite their fine reputations and their widespread availability from CompuServe's forums, bulletin boards and user groups), the authors have filled a giant void. Even better, they offer some of the most lucid instruction available.

Each of the three programs has its

own section within the book, and each program section contains three levels of information. First is an introductory chapter guaranteed to get you up and running with PC-Write, PC-File or PC-Talk within 15 minutes. Since shareware usually comes on a disk with no paper documentation, these chapters should be especially helpful to new users.

Next is a tutorial chapter with instructions for doing basic tasks such as reformatting text, defining a database field or automatically redialing on your modem. Finally, there is a reference section for more advanced users. Although I have been using PC-Talk for more than four years, I found a number of helpful tips in the reference section, including how to turn off my telephone's intrusive "call waiting" feature and when to use the program's pacing option. The authors have also thoughtfully provided detachable, thick Manila "command cards" for each program, which you can easily refer to while you work.

The fourth section of the book tells

how to integrate the three shareware programs: for instance, how to customize PC-Write to handle incompatible files downloaded by PC-Talk and how to use all three programs in concert to develop bibliographies.

A fat appendix section adds still more information, from how to use a mouse with PC-Write to where to obtain other shareware programs. One appendix section called "LeastDOS (The Least You Need to Know About DOS)" is one of the clearest and most concise explanations of the IBM operating system I've ever seen and is alone worth the price of the book, especially for new users.

If you don't already own PC-Write, PC-File and PC-Talk, the book also offers discount coupons for obtaining them (at a total of \$40 off). Since even without the discount these programs cost under \$200, that is a terrific deal. And so is *The Shareware Book*.

Lindsay Van Gelder has written about IBM PCs and other computers for PC, PC World, PCjr and other publications. Her CompuServe User ID number is 70007,1416.

Advanced Microsoft Word

By Mark Brownstein
Osborne/McGraw-Hill, 1987
331 pages, \$17.95 (softcover)

Reviewed by Robert Sanchez

Don't be put off by the word "advanced" in the title. *Advanced Microsoft Word* is a clearly written, carefully explained treatment of Microsoft Word that a beginner can use. With early chapters on installation and setup of the program, on the keyboard and the mouse as well as editing basics, this book can easily give the initial impression that it is less than advertised.

In fact, it is more. Brownstein commonly discusses basic and advanced features side by side. For example, when you read about getting into Word, you also read about going directly into the last program you worked on.

If you are a beginning Word user, you will find that the author covers the

basics well. His competent, readable style is enhanced by several amusing examples and by straightforward honesty. For instance, he offers advice on how to recover files when your system crashes, but warns that his solution is "certainly far from elegant, but if you're lucky, it may work."

Most of the author's advice is far more definite and useful. While several of the 16 chapters dwell on the bare essentials, several others concentrate on the more advanced features. With equal clarity and style, Brownstein takes you through the mundane search-and-replace and through the more esoteric running headers and footers, automatic indexing and library functions.

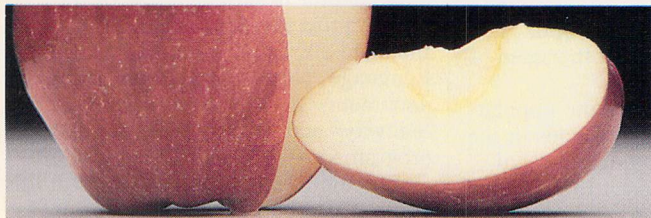
For me, Brownstein was particularly helpful in showing how to delete running headers and footers. I had spent a fruitless hour trying to figure it out on my own, and then the author came to my rescue with a helpful tip. What I wanted to do fell into the it's-easy-if-you-know-how category. It isn't obvious, but it is easy.

Some of the author's tips play on Word's strengths as a text formatter, such as using the running-head feature to create your own letterhead. On the other hand, following his instructions on style sheets was rather difficult for me. Were some steps in creating a style sheet too obvious for the author to mention? Perhaps, but not to me. This, though, is a small matter in what is overall an excellent guide to the power of Microsoft Word.

Incidentally, the book's three appendices include a helpful discussion of using Word with Microsoft Windows, the obligatory list of ASCII characters (is there a computer book without one?) and a keyboard command summary borrowed from the Microsoft Word manual.

Although I have a quibble here and there, beginning and experienced Word users alike should own a copy of *Advanced Microsoft Word*.

Robert Sanchez is a technical writer living in North Billerica, Mass.



If you are not an Apple Forum member... your October issue of *Online Today* will be several pages shy.

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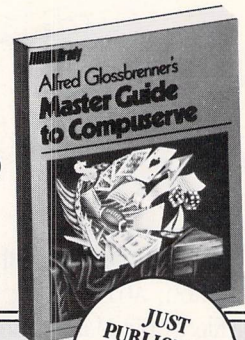
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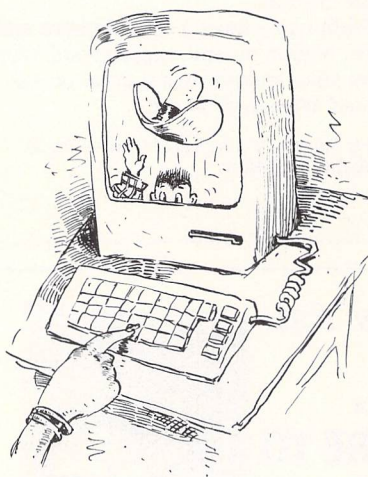
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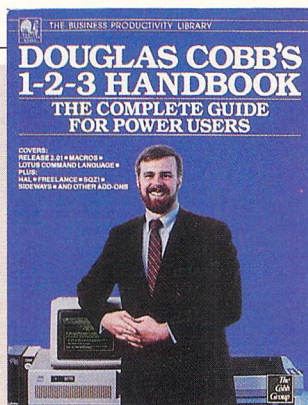


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1-2-3 Handbook helpful: Cobb's excels

Douglas Cobb's 1-2-3 Handbook

By Douglas Cobb
Bantam Books, 1986
700 pages, \$22.95 (softcover)

Reviewed by Harry Green

It is a safe guess that more has been written about how to use Lotus 1-2-3 than any other program, with the possible exception of Wordstar and PC-DOS. The publisher claims that *Using 1-2-3*, the predecessor to this book, has sold more copies than any other computer book written.

Whether this testifies to the popularity of the program or deficiencies in the 1-2-3 manual is open to question, but the manual isn't the easiest to read, and the version 2.0 manual took a step backward from the original version. When you consider that the 1-2-3 version 2.0 manual contains 304 pages and this book more than twice as many, you might conclude that either Cobb has gone into excessive detail or the 1-2-3 authors have left something out.

Although I'm an unabashed fan of 1-2-3, I've found the manual less than an ideal way to learn the program. The *1-2-3 Handbook* is so good that it is too bad Lotus doesn't include it with the program. Even if the price of the program was raised a few dollars, it would be worth it because this book is far more complete in its explanations and illustrations than the 1-2-3 manual.

Douglas Cobb's 1-2-3 Handbook is logically organized into 15 chapters and three appendixes, each covering a topic in depth. Besides explaining thoroughly what each menu operation does, Cobb regularly includes sections entitled "Tip" that explain how to use the commands and functions. Particularly helpful are marginal notations highlighting differences between versions 2.0,

2.01 and earlier versions. If you're wondering whether to upgrade, a quick scan through the book will show the added value of version 2.0. It will also show how 2.01 corrects some behavioral quirks of 2.0.

Pareto's Law states that you get 80 percent of the value from 20 percent of the effort in most endeavors. I suspect this applies to 1-2-3. There may be people who use all of its options, but most of us learn the basics and settle for these, unaware that a better way lurks in some undiscovered command.

Read this book, practice some examples and you're almost certain to move up a notch in skill level. Beginners can move to intermediate quickly, and even the experts should learn enough to justify the cost of the book.

Falling into the category of under-used options are macros and the Lotus Command Language that was introduced in version 2.0. Cobb includes three chapters that demonstrate how to write and debug these mini-programs. Two chapters explain graphs, and one explains 1-2-3's database functions. A final chapter describes a few of the add-on programs that enhance 1-2-3. Included are Lotus's Human Access Language, Note-It, which internally documents spreadsheets, Freelance, Sideways and several other popular programs.

For the information contained in this book, it is a bargain. In terms of pages per dollar, it tops the value list, but value isn't based on size alone. In this book, the value is in its superior content.

Harry Green is president of Pacific Netcom Inc., a Portland, Ore., firm that consults with businesses on using office automation and telecommunications to improve productivity. His CompuServe User ID number is 70007.431.

Looking for Some Good Reading Material?

You'll find more computer book reviews in *Online Today Electronic Edition*. Just type GO OLT-240 from any prompt on the CompuServe Information Service and choose this month's reviews from the main menu.

ONLINE
T O D A Y

The Information Edge

By N. Deane Meyer and
Mary E. Boone
McGraw-Hill, 1987
333 pages, \$24.95 (hardcover)

Reviewed by William J. Lynott

Can office automation really improve managerial productivity? The authors of *The Information Edge* think so. However, this question is far from resolved in the minds of many business leaders.

Few executives have any remaining doubts about the advantages of OA for routine clerical and secretarial activities. Such chores as typing repetitive letters and maintaining databases for storing certain types of business information are clearly fodder for computers, word processors and other tools of the technological revolution. But many executives continue to resist the idea of supplying OA tools for managers.

With today's emphasis on measuring and improving bottom-line performance, there is much reluctance to invest in equipment for tasks that cannot be easily quantified. After all, how can you measure the productivity of a manager or executive whose work is almost entirely subjective?

Can you classify the time an executive spends on his coffee break as productive time? Don't be too quick to answer. What if the best and most profitable idea of his career occurs to him during a coffee-break discussion with an associate?

These are the kinds of questions that must be asked by anyone who sets out to measure or improve managerial productivity. The difficulties inherent in this dilemma are faced squarely by the authors of *The Information Edge*.

While I certainly can't say that this book proves once and for all that OA can and does improve managerial productivity, I have to admit that the authors make a convincing case. With thoroughness and professionalism, Meyer and Boone have researched examples of OA successes in more than 60 companies. From the business operations of a self-employed musician to some of the largest corporations in the country, the book examines before and after results. Specifics, including actual dollar savings or sales increases are projected. Case histories cover the major aspects of business from operations and finance to marketing.

Frankly, I find a few of the case histories to be more than a little overly

optimistic — too hazy to justify true cause-and-effect relationships. The authors have boldly placed dollar values and "odds" for success on such dramatically subjective activities as negotiating with your boss or conducting more productive meetings.

However, there are enough cases that present solid evidence in support of the authors' thesis to make this book worthwhile. Detailed analysis of before and after results in such easily measured areas as sales and people scheduling are not only convincing but also interesting.

If you are involved in decisions concerning the purchase and use of office automation equipment, you will find *The Information Edge* to be a source of solid information. You'll have to draw your own conclusions about some of the case histories, but I think you'll agree that the time you spend reading this book is time well spent.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007.420.

Electronic Edition Book Reviews

The following book reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-240 at any CompuServe Information Service prompt.

Excel: Using Macros, by Kent Blankenbaker and Rob Winike, Weber Systems Inc.

Amiga User's Guide to Graphics, Sound and Telecommunications, by David Myers, Bantam Computer Books.

1-2-3: The Complete Reference, by Mary Campbell, Osborne/McGraw-Hill.

Programmer's Guide to GEM, by Phillip Balma and William Fitler, Sybex.

Windows: The Official Guide to Microsoft's Operating Environment, by Nancy Andrews, Microsoft Press.



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ProWriter Jr. Plus

C. Itoh Digital Products has added more speed, memory and faster throughput to its popular ProWriter Jr. dot-matrix printer.

The enhanced printer is called ProWriter Jr. Plus and features 160 cps in draft mode, 48 to 61 lines per minute

and a buffer memory of 8K. A space saving, built-in printer stand allows for paper to be placed underneath the printer. Retail price is \$369.

For information, contact C. Itoh Digital Products Inc., 19750 S. Vermont Ave., Suite 220, Torrance, CA 90502; 213/327-2110.

pc-FAX

Pc-FAX from Electronic Information Technology is a multi-function, 9600-baud modem card that provides complete PC-to-PC communications and Group III fax transmissions between PCs and facsimile machines.

Software features include image handling, text and image merging and ASCII to fax file conversion. The Optical Character Recognition option enables the user to receive a facsimile of a type of document and convert that document to a format that may be edited by a standard word processor. Retail price is \$1,095. The Optical Character Recognition option sells for \$595.

For information, contact Electronic Information Technology Inc., 25 Just Rd., Fairfield, NJ 07006.

Windows inTalk

Palantir Software has introduced Windows inTalk Version 1.1, a powerful communications software for Microsoft's Windows operating system on MS-DOS computers. InTalk handles standard modem communications and runs with twice the speed of earlier releases. Other added advantages are that it requires only 128K of memory and has a new "snap style" scrolling feature for fast screen updates. CompuServe graphics can be saved to disk. Retail price is \$195; registered owners of earlier versions can receive a free upgrade by sending their original disk to Palantir.

For information, contact Palantir Software, 12777 Jones Rd., Suite 100, Houston, TX 77070; 800/368-3797 or 713/955-8880.

Extended File Handling

Articulate Publications has introduced the second version of the Extended File Handling for Medicalis and Dentalis health-care practice management system for the CP/M-86 and Concurrent-DOS operating systems.

The system will allow users to maintain several years worth of data online

at all times. Extended File Handling eliminates sorting while allowing fast, multiple key searching and reporting. Any file up to 32MB and 1,000,000 records can be handled.

For information, contact Articulate Publications Inc., 402 N. Larchmont Blvd., Los Angeles, CA 90004-3048; 213/871-1350.

db QUERY

Db QUERY from Raima Corp. is a query language system for use with Raima's db VISTA Database Management System for C language application development.

The program provides a familiar relational view of a network model database and allows the developer to create a customized query utility that becomes part of a royalty-free db VISTA application. Db QUERY is available for MS-DOS, Unix, Xenix, Unos, Ultrix and VAX VMS operating systems.

For information, contact Raima Corp., 3055 112 Ave. N.E., Bellevue, WA 98004; 206/828-4636.

Voice/Data Modem

Coherent Communications Systems Corp. has introduced a simultaneous voice/data modem.

Called the Coherent SPM-94C, the unit allows transmission of simultaneous voice and data over the dial-up or public-switched telephone network. The modem eliminates the need to install a second telephone line for data at each end.

For information, contact Coherent Communications Systems Corp., 60 Commerce Dr., Hauppauge, NY 11788; 516/231-1550.



Diga!

Diga! from Aegis Development is a new telecommunications program for the Amiga computer.

Diga! allows use of the Doubletalk file transfer capability, which lets users communicate with other Amiga computers with high-speed, two-way packet file transfer. This means that while two computers are connected via modem, one can be sending a file and receiving a file while the users "talk" back and forth to each other through the keyboard. Retail price is \$79.95.

For information, contact Aegis Development Inc., 2115 Pico Blvd., Santa Monica, CA 90405; 213/392-9972.

Sensible Writer

Sensible Software has introduced Sensible Writer, a new mouse-based word processor.

Available for the Apple IIGS, IIc or IIe, Sensible Writer features pull-down menus, built-in mail merge for personalized form letters, rulers to format documents and automatic envelope addressing. It can also handle two large documents simultaneously. Retail price is \$99.95.

For information, contact Sensible Solutions Inc., 210 S. Woodward, Suite 229, Birmingham, MI 48011; 313/258-5566.



Electronic Edition Product Announcements

The following new product announcements are available this month on *Online Today Electronic Edition* by typing GO OLT-250 at any CompuServe Information Service prompt.

dONetwoTHREE, software that allows dBASE users to access Lotus data directly from dBASE, Communication Horizons.

WinPrint, Microsoft Windows application that increases printing speeds to networked PostScript printers and typesetters, Tangent Technologies.

Krypto-MITE, software that provides hardware level DES encryption, Mycroft Labs Inc.

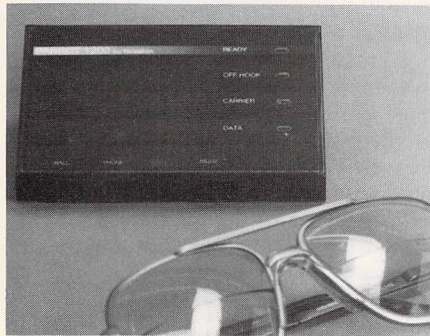
DS Backup, backup utility for the Apple Macintosh, Design Software Inc.

Spellin!, add-in spelling checker for Lotus 1-2-3 and Symphony, Turner Hall Publishing.

TnT (Text n Title), free IBM PC software package designed to create 35mm text and title slide files, Light Inc.

W.O.R.K. At Home, home office software program for word processing and calculations, Britannica Software.

Braille Interface Terminal, provides complete braille access to off-the-shelf computer programs designed to run on the IBM PC, XT, AT and compatibles, Telesensory Systems Inc.



Three-Ounce Modem

Novation Inc. has introduced a new 300/1200 baud Hayes PC-AT-compatible modem that retails for \$119 and weighs

just three ounces.

The Novation Parrot 1200 is approximately the size of an audio cassette. A technologically innovative microprocessor-controlled power management system enables the unit to function at exceptionally high levels of reliability using only the power available from the host computer's RS-232 serial interface. Neither batteries nor external AC power are required. Features include asynchronous data format, full-duplex operation, built-in auto self-test, analog loop-back and Touch-Tone and pulse dialing.

For information contact Novation Inc., 21345 Lassen St., Chatsworth, CA 91311; 818/998-5060.

Computer Coverup

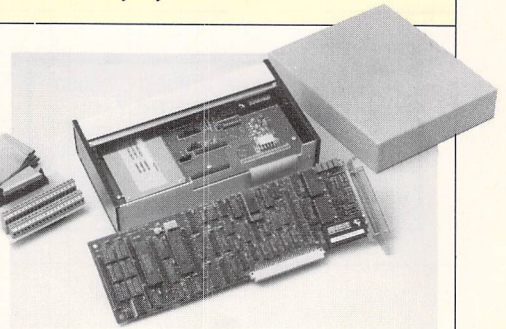
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Lab Master II

Lab Master II from Scientific Solutions is the first acquisition/process control board designed to operate with the new open architecture of the Macintosh II personal computer.

Lab Master II is a single-slot board that connects to the Macintosh II's high performance 32-bit Nu Bus interface. The package consists of the interface board, an external cabinet containing the A/D converter and a screw terminal board. The external unit can be installed up to 100 feet away from



the Mac.

For information, contact Scientific Solutions Inc., 6225 Cochran Rd., Solon, OH 44139-3377; 216/349-4030.

Auto-Intelligence

IntelligenceWare has introduced Auto-Intelligence, one of the first commercial automatic knowledge acquisition systems.

The program captures the knowledge of an expert through interactive interviews, distills the knowledge and then

automatically generates an expert system. Auto-Intelligence retails for \$990 and is designed for the IBM PC, PC-XT and PC-AT.

For information, contact Intelligence Ware Inc., 9800 S. Sepulveda Blvd., Suite 730, Los Angeles, CA 90045; 213/417-8896.

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1. Aug. 1987 Advertisers
2. July 1987 Advertisers
3. June 1987 Advertisers

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To request information about products reviewed in the print edition, go to page OLI-280 and select the appropriate listing, such as August Hardware Reviews. At the next menu, select the product you're interested in. If you answer "yes" at the question prompt, the OLI system will prompt you for the necessary information.

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3. Aug. New Product Listings

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Mail to: Online Today, Reader Service Management Dept., P.O. Box 376, Dalton, MA 01227-0376.

August issue, not valid after November 1987.

Commands Enhance Online Conversations in CB, Forums

Those of us who get interested in real-time talk — whether through the CB Simulator (GO CB) or through the conferencing facilities of the forums — usually go through two stages.

First, we get interested in *public* talk, using the public channels and conference rooms to chat with scores, sometimes hundreds, of people at the same time, as if we were at a giant cocktail party or at a seminar.

Later, as we make online friends and associates, we usually begin to use the same facilities for more private conversations.

Most conference participants become familiar with the primary command for privacy — the /TALK option. You can invite another subscriber into a private "Talk" by typing /TALK followed by his or her "job number," as in /TALK 32.

Job numbers are assigned automatically to each subscriber as he or she enters the system, and several commands are available to report them to you:

- "Jobs" appear on the list produced by the /USERS command in conferencing.
- If you type /WHO followed by a User ID number, the system will report the other party's current job number, node, room number and name.
- To find your own job number, type /JOB and press the Return key.

After you've entered a /TALK command, the system advises you to wait while it informs the recipient of the invitation. It's up to the other party to type /TALK followed by *your* job number in order to make the connection. After that, the system tells both of you that the connection has been made. Then you can chat, away from the view of those on the public channels or rooms. The talk can be ended by either of you by typing /BREAK.

/TALK works just fine for one-to-one conversations, but it will not help if you really want to talk privately with *several people* at the same time. To accomplish that, you need to use one of the "scramble" options, commands that some users seem to be confused about.

Scramble works this way:

You and your friends tune in to the same channel of CB or the same conference room of a forum and type /SCR

followed by an agreed-upon code word, such as /SCR PAPER. Only those who are tuned to that channel or room and who enter the command and the proper code will see the conversation from then on. Participants don't have to scramble at the same time, though — a friend who comes along later can join you by logging on to the appropriate channel or room and entering the code.

Other commands such as /USERS still work while you're in the scrambled mode. Any participant can drop out of the scrambled talk and return to the public channel by typing /UNS (that is, "unscramble").

People who use scramble regularly often use the same code word for each session together and send EasyPlex messages to inform new participants so that the code doesn't have to be discussed openly on public channels.

The /USERS command will tell you if others on a channel have scrambled their conversation. Suppose you arrive on Channel 5 or Room 5 and, while the /STA command tells you there are four subscribers on the channel or room, you're seeing no public talk. By typing /USERS 5 you might see a report like this:

```
*****
User User ID  Nod Rm Name/Forum
-----
1  70000,012  NYJ 5s  H. Ross Perogi
2  70000,0010 IND 5s  C.Y.Bor
3  70007,411  CWV 5   Bluegrass
4  70000,100  PNX 5s  Izod
*****
```

The "s" after the channel number for three of the four users means "scrambled."

Two other forms of scramble are available for special occasions: /SMC means "scramble and monitor clear." In other words, typing it followed by the code word — /SMC PAPER — allows you to transmit a conversation while listening to messages from *both* the scrambled and unscrambled conversations.

This is particularly useful if one of your usual participants is late in arriving. With /SMC you can keep an eye on the public conversation and when the late-comer shows up, you can type /UNS and then say, "Hey, George, we're already scrambled — usual code," or whatever.

The flipside of /SMC — that is, transmitting a public conversation while monitoring both the public and scrambled conversations — is /XCL. In our example, /XCL PAPER allows you to listen to the scrambled talk while continuing to talk and listen to the public conversation.

All of these forms of private talk are available in both the CB Simulator and the conferencing areas of the various forums. Meanwhile, an additional kind of private communications has been initiated in the forums. It is the /SEN (that is, "SEND") command. In the forum conference area, you can send a quick private message to another person on a public channel by typing /SEN followed by his or her job number and a message of no more than 80 characters. It works as a kind of electronic whisper.

Suppose you're in a public conference with others and you want to remind a friend of a question he said he was going to ask. Since you wouldn't want to interrupt the conference with the message, it's an ideal use for the new /SEN.

You could type the /USERS command to find your friend's job number and then type something like:

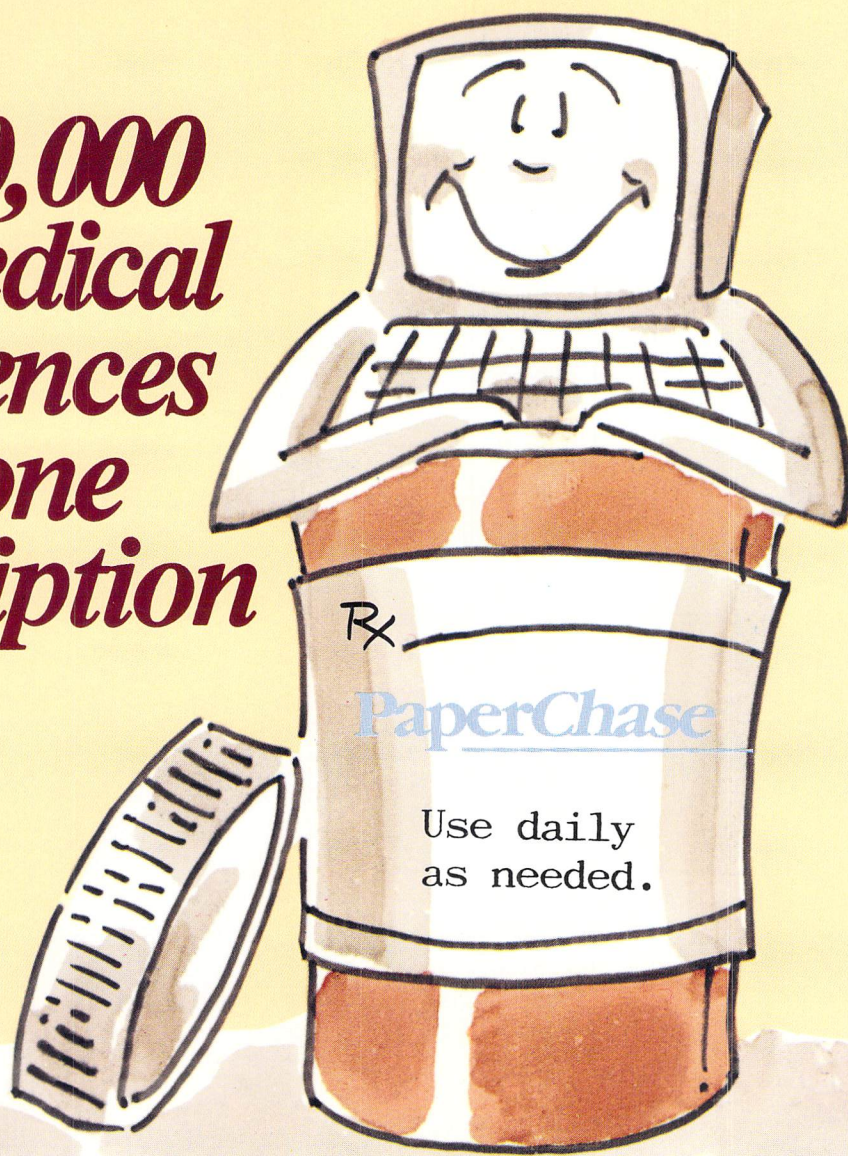
```
*****
/SEN 23 George — Remember to ask
about the new operating system.
*****
```

George would receive your words along with a message containing your job number in case he wants to /SEND a whisper back to you.

Incidentally, old hands in the forums recognize the SENd command. For years it has been available *outside* the conferencing area as a means of communicating from any prompt or menu of a forum. If you want to send a quick note to another member, simply type SEN (without the slash) followed by the job number and the message. As with /SEN, the other party will receive your words along with your job number in case he or she wants to reply. Using SEN from the Function prompt is a common way to invite another forum member into the conferencing area for a spur-of-the-moment chat.

Charles Bowen, a contributing editor of Online Today, co-authored How to Get the Most Out of CompuServe and CompuServe for IBM Power Users. His CompuServe User ID number is 70007,411.

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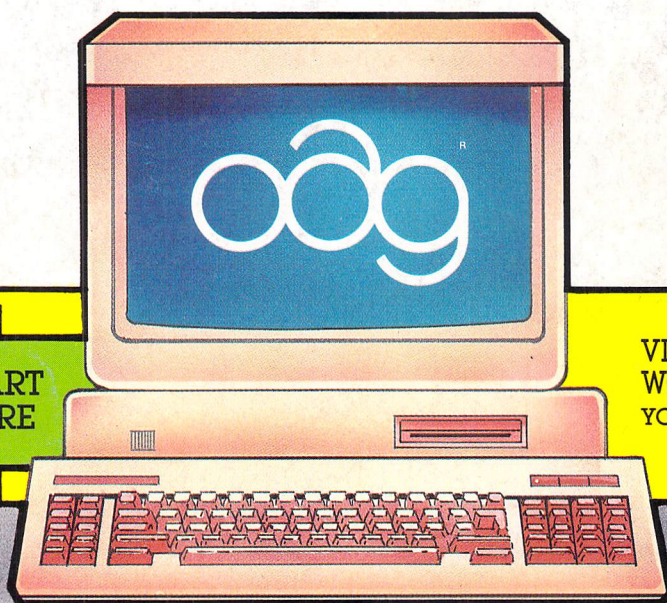
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